Florida WILDLIFE

NAPOLEON OF THE NORTH FORK

SAVE YOUR TROPHY BIRD

WATERFOWL HEX

JANUARY, 1957 *The Florida Magazine for all Sportsmen* 25 CENTS

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REGULATIONS FOR 1956-57 HUNTING SEASON

	OPEN SEASON FOR TAKING GAME BIRDS AND GAME ANIMALS					OPEN SEASON FOR TAKING MIGRATORY BIRDS			
DISTRICT	DEER With one or more 5" antlers	TURKEY	QUAIL	SQUIRREL	RAIL AND GALLINULE (Marsh Hen)	DOVE	WATERFOWL AND COOT Duck Geese Coot	WOODCOCK	SNIPE
Day's Bag	1	2	10	10 Gray 2 Fox	10 Sora Rail 25	8	*4 2 10	4	8
Season's Bag	2	*3					Duck Stamp Required for Duck & Geese		
1st District	Tues. before Thanksgiving (Nov. 20) to Jan. 13 EXCEPT that part of Lee & Hendry South of St. Rd. 80, Nov. 20 to Jan. 1. Hunting permitted every day. EXCEPT Hardee, Manatee, Sarasota, Pinellas, DeSoto, Polk South of St. Rd. 60 and Hillsboro South of St. Rd. 92 CLOSED.	EITHER SEX Tues. before Thanksgiving (Nov. 20) to Feb. 1 EXCEPT that part of Lee & Hendry South of St. Rd. 80, Nov. 20 to Jan. 1 ALSO EXCEPT Hardee, Manatee, Sarasota DeSoto, SPECIAL SEASON Nov. 20 to Nov. 25 and Dec 22 to Dec. 25, with day's bag and *seasons' bag limited to 2—all turkey taken to be tagged with special tag to be supplied. Hunting permitted every day. EXCEPT Hernando, Pinellas, Polk, South of St. Rd. 60 and Hillsboro South of St. Rd. 92 CLOSED.	Tues. before Thanksgiving(Nov. 20) to Feb. 1. hunting permitted every day.	Tues. before Thanksgiving(Nov. 20) to Feb 1. EXCEPT that part of Lee and Hendry South of St. Rd. 80, Nov. 20 to Jan. 1. Hunting permitted Every day.	Sept. 1 to Nov. 9 Hunting permitted every day.	Oct. 13 to Oct. 31 and Dec. 1 to Jan. 5 Hunting permitted every day. EXCEPT Polk, Highlands, Glades, Hendry, Lee, Charlotte, DeSoto, Hardee, Manatee, Sarasota, Dec. 1 to Jan. 5 ONLY.	Nov. 7 to Jan. 15 Hunting permitted every day	Nov. 20 to Dec. 29 Hunting permitted every day.	Dec. 15 to Jan. 13 Hunting permitted every day.
2nd District	Tues. before Thanksgiving (Nov. 20) to Jan. 13 1st 6 days open. Dec. 25 to Jan. 1 open. Mon. Tues. & Fri. closed at all other times. EXCEPT Alachua, Bradford, Union, that part of Baker, Nassau & Columbia South of U.S. 90 from Jacksonville to Lake City and that part of Columbia & Suwannee South and East of St. Rd. 247 from Lake City to the Suwannee River CLOSED. SPECIAL SEASON Gilchrist & Clay Nov. 20 to Dec. 9. 1st 6 days open. Mon. Tues. & Fri. closed thereafter.	EITHER SEX Tues. before Thanksgiving (Nov. 20) to Feb. 1 1st 6 days open. Dec. 25 to Jan. 1 open. Mon. Tues. & Fri. closed at all other times. EXCEPT Alachua, Bradford, Union, that part of Baker, Nassau & Columbia South of U. S. 90 from Jacksonville to Lake City & that part of Columbia and Suwannee South and East of St. Rd. 247 from Lake City to the Suwannee River CLOSED. SPECIAL SEASON Clay Nov. 20 to Dec. 9 1st 6 days open. Mon. Tues. & Fri. Closed thereafter. SPECIAL GOBBLER SEASON Mar. 30 to April 8 —½ hour before sunrise to 12 noon.	Tues. before Thanksgiving(Nov. 20) to Feb 1. 1st 6 days open Dec. 25 to Jan. 1 open. Mon. Tues. & Fri. closed at all other times.	Tues. before Thanksgiving(Nov. 20) to Feb 1. 1st 6 days open. Dec. 25 to Jan. 1 open. Mon. Tues. & Fri. closed at all other times.	Sept. 1 to Nov. 9 Hunting permitted every day.	Oct. 13 to Oct. 31 and Dec. 1 to Jan. 5 Hunting permitted every day.	Nov. 7 to Jan. 15 Hunting permitted every day	Nov. 20 to Dec. 29 Hunting permitted every day.	Dec. 15 to Jan. 13 Hunting permitted every day.
3rd District	Tues. before Thanksgiving (Nov. 20) to Jan. 13 Hunting permitted every day. Okaloosa, Santa Rosa, Walton & Escambia closed Jan. 1.	EITHER SEX Tues. before Thanksgiving (Nov. 20) to Feb. 1 Hunting permitted every day. SPECIAL GOBBLER SEASON Mar. 30 to Apr. 8—½ hour before sunrise to 12 noon.	Tues. before Thanksgiving(Nov. 20) to Feb. 1. Hunting permitted every day.	Tues. before Thanksgiving(Nov. 20) to Feb. 1. Hunting permitted every day.	Sept. 1 to Nov. 9 Hunting permitted every day.	Oct. 13 to Oct. 31 and Dec. 1 to Jan. 5. Hunting permitted every day. That part of Franklin County East of St. Rd. 30 and a line extending from the point where St. Rd. 30 turns west to the water line and including all of Alligator Point shall be closed to the taking of dove during the Oct. 13-Oct. 31 portion of the dove season.	Nov. 7 to Jan. 15 Hunting permitted every day	Nov. 20 to Dec. 29 Hunting permitted every day.	Dec. 15 to Jan. 13 Hunting permitted every day.
4th District	Tues. before Thanksgiving (Nov. 20) to Jan. 13 EXCEPT Dade, Broward, Collier, Monroe and that part of Palm Beach South of St. Rd. 80, Nov. 20 to Jan 1 Hunting permitted every day. Monroe county closed to Key Deer.	EITHER SEX Tues. before Thanksgiving (Nov. 20) to Feb. 1 EXCEPT Dade, Broward, Collier, Monroe and that part of Palm Beach South of St. Rd. 80 Nov. 20 to Jan. 1. Hunting permitted every day.	Tues. before Thanksgiving(Nov. 20) to Feb. 1.	Tues. before Thanksgiving(Nov. 20) to Feb. 1. EXCEPT Dade, Broward, Collier, Monroe and that part of Palm Beach South of St. Rd. 80, Nov. 20 to Jan. 1. Hunting permitted every day.	Sept. 1 to Nov. 9 Hunting permitted every day.	Oct. 13 to Oct. 31 and Dec. 1 to Jan. 5 Hunting permitted every day. EXCEPT Collier Dec. 1 to Jan. 5 ONLY.	Nov. 7 to Jan. 15 Hunting permitted every day	Nov. 20 to Dec. 29 Hunting permitted every day.	Dec. 15 to Jan. 13 Hunting permitted every day.
5th District	Tues. before Thanksgiving (Nov. 20) to Jan. 13 1st 6 days open. Dec. 25 to Jan. 1 open. Mon Tues. & Fri. closed at all other times.	EITHER SEX Tues. before Thanksgiving (Nov. 20) to Feb. 1 1st 6 days open. Dec. 25 to Jan. 1 open. Mon. Tues. & Fri. closed at all other times.	Tues. before Thanksgiving(Nov. 20) to Feb. 1. 1st 6 days open. Dec. 25 to Jan. 1 open. Mon. Tues. & Fri. closed at all other times.	Tues. before Thanksgiving(Nov. 20) to Feb. 1. 1st 6 days open. Dec. 25 to Jan. 1 open. Mon. Tues. & Fri. closed at all other times	Sept. 1 to Nov. 9 Hunting permitted every day.	Oct. 13 to Oct. 31 and Dec. 1 to Jan. 5 Hunting permitted every day. EXCEPT St. Johns, Putnam, Flagler, Volusia, Brevard, Orange, Seminole, Osceola, and those portions of Marion County east of U. S. Highway 301 north of Ocala and that portion of Marion and Lake Counties east of U.S. Highway 27 south of Ocala Dec. 1 to Jan. 5 ONLY.	Nov. 7 to Jan. 15 Hunting permitted every day	Nov. 20 to Dec. 29 Hunting permitted every day.	Dec. 15 to Jan. 13 Hunting permitted every day.

ALL DATES SHOWN ARE INCLUSIVE

VOLUME 10, NO. 8

Florida WILDLIFE

JANUARY, 1957

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Published monthly by the
FLORIDA GAME AND FRESH WATER FISH COMMISSION
Tallahassee, Florida

★

**Dedicated to the
Conservation, Restoration, Protection of our Game and Fish**

★

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FEDERATION NOTES

By TOMMY ANDERSON

PRESIDENT SAM DUBON called together the first session of the meeting of the Florida Wildlife Executive Committee at 8:20 P.M., November 17, at the Angebilt Hotel, Orlando.

President DuBon explained that this meeting was called for the purpose of appointing committees. Since last year's committees did not fully cooperate, he asked for names of those who would serve this year. He stressed the importance of the work the Federation must do this year in view of the new Legislation being written. Eric Watson, Chairman of the Legislative Program, will need all the help he can get in seeing to it that the wishes of the Federation are carried out through the new laws.

After discussion by all members, President DuBon named the following committees and chairmen to serve during '57: EXECUTIVE COMMITTEE: Chairman, Eric Watson; Helen Sullivan, CONA (Tentative); MEMBERSHIP COMMITTEE: Chairman, T. N. Anderson; John Evans, Fred Gill and John Valantine; FUND RAISING COMMITTEE: Chairman, Dr. H. R. Wilber; SALT WATER RESOURCES: Chairman—Open; Jean Moltere, Hubert W. Robertson, Gary Bennett; FRESH WATER AND GAME: Chairman, John Valantine; Don Southwell; WATER RESOURCES AND LAND USE: Chairman, Charlie Collins; Mrs. Bigelow, Ken Friedman; LEGISLATIVE COMMITTEE: Chairman, Eric Watson; Fred Gill, Russell Saxon; YOUTH CONSERVATION: Chairman, John Geitgey; Ray Norton, Mallory Welch, Don McAllister (Orange County Sportman's Association.)

In discussion of salt water resources DuBon reported that a joint meeting between the Southeastern Fisheries, FOWA, and FWF was held October 20 at Miami. Roy Duggan expressed the desire of the Southeastern Fisheries to cooperate with the other two named organizations. The next meeting of the three will be held Saturday, December 1, when it is hoped agreements beneficial to all concerned can be set up. In answer to a question from Hubert W. Robertson, President DuBon said this meeting will be reported on via bulletin to all interested parties.

Eric Watson reported on tentative recommendations the legislative committee intends to make to the legislature, which are as follows: Snook Bill—Stop sale immediately. Penalty Bill—to give judges minimum penalties whereby they can fine severely or confiscate equipment. Uniform Fishing License, Alien Fishing License, Licenses for Alligators and Wildlife Held in Captivity; A Stronger Bait Dealer's license; Short Term Hunting License; Air Boat Licenses; Amendment to Existing Hunting and Fishing Laws providing for small increase to be used in hyacinth control, Youth Conservation work and land acquisition and management. Easement of Navigable Waters—Recommend that useless laws be repealed and new laws adopted in reference to statutes of the State of Florida, particularly 790.15. Small Boat Bill —Making it illegal to rent unsafe boats from any inland camp, etc. Legislation covering increased dealer licenses to cover sale of fish by people other than those fishing commercially for a livelihood.

Eric Watson reported he will call a meeting of the Legislative Committee with the Executive Committee of FWF in late January or early February to study legislative matters together.

Fred Sturgis, President of the Georgia League of Sportsmen, thanked the Florida Delegation who attended the Georgia meeting and expressed his pleasure at being here.

This session adjourned at 9:45 P.M.

SECOND SESSION—9:20 A.M. November 18—DuBon presiding.

Dr. H. R. Wilber reported on the Florida Conservation Awards program sponsored by Sears Foundation. Before getting into the report, Doc called on John Valantine for news of the St. Petersburg Club. Valantine said the Club was doing fine, financially and in every other way. Dr. Wilber then explained at length the Sears Foundation Awards, in which matter he is working closely with Mr. Greenway, assistant director of the Foundation in 17 southern states.

It is confidently expected that Doc will have the "go-ahead" by January 15. Soon thereafter each club in the FWF will receive a packet containing medals and all rules, regulations, etc. The medals will be gold lapel pins made in the shape of the State of Florida, with I CONSERVE across the front.

Each club is to produce through newspapers, magazines, radio or such media publicity about the awards program. There will be no cost to local clubs. Awards must be presented at public meetings by local clubs. The program is under the auspices of the FWF and is not in any way to be considered advertising for Sears stores.

Brochures giving complete details of the program will be mailed from the office of the Executive Secretary. Clubs must be paid up to qualify.

It was moved by Fred Gill, seconded by Hubert Robertson, to adopt the program. The motion passed unanimously. President DuBon asked that each club take an active part in this program, which will be a great asset to the FWF.

Dr. Wilber stressed the need for a Field Secretary for the FWF. The work cannot be done any longer by a few men. He said that the professional fund-raising program had been done away with since it did not get enough support. As an alternative he suggested the Executive Committee of FWF make a 60-day effort to raise a basic amount of paid or pledged finances to give a basis for hiring a Field Secretary.

He suggested the Federation have pledge cards printed, on the back of which will be an announcement of the endowment fund and its purposes. The goal for this fund would be two hundred thousand dollars, "Open End" so that it could be made more. 80% of the funds would immediately be placed in an endowment fund; 10% would be for cost of creation of the endowment fund,

and the other 10% allotted to a legislative fund. Thereafter, 90% of the income would be confined to the endowment fund and 10% to continuing expense.

He suggested if and when the Federation hires a Field Secretary that man be given $100.00 a week plus expenses.

Dr. Wilber said we would have no trouble investing $200,000 to bring to bring returns of at least 5%. $10,000 would carry the office for years to come, and save the Federation from having to make annual fund drives.

The Field Secretary would take over the task of going to Tallahassee during legislation, an extremely important duty.

President DuBon called for a motion to go along with Doc on the fund-raising move, except that details of administration and distribution be left up to the executive committee. It was moved by Robertson, seconded by Collins, and passed unanimously.

Dr. Wilber said minutes of this FWF organizational meeting and pledge cards would be in the mail by November 23, or as soon thereafter as possible.

Other business brought before the meeting: E. Schulte told of the need for a uniform pistol act being propounded by the National Rifle Association.

On Youth activities, DuBon mentioned True-to-Life books by Dr. Eschmeyer offered through Fisherman's Press, Oxford, Ohio. These books, in a series of ten, are $1.00, cloth-bound; 50c paper-bound; less in quantity.

A letter was read from the Corps of Engineers in Jacksonville showing that they are working with the FWF and the G & F W F C on the Barge Canal.

Tommy Anderson asked that FWF go on record as recognizing the emergency need for helping in some way the camp owners at Lake Apopka, if only to give moral support. Sam ordered this included in the minutes.

E. C. Shearer of Pasco County Fish and Game Club sent a letter and poster about hunting courtesy rules. They would like to see the Federation put out such posters. No action was taken.

It was moved by Robertson, seconded by Stephenson, and unanimously passed that Dr. Wilber be sent by the Federation to Washington to the National Wildlife Federation meeting.

The meeting adjourned at 12:30 P.M. ●

dog chatter

By GEORGE CROWLEY

TRADITION AND sentiment decree that Christmas presents be given on the exact date, and the greater the surprise the better. But in the case of the Christmas puppy, it would be kinder to forget tradition and sentiment and bring him to his new home a few days early.

Even under the best of circumstances it's a disturbing experience for a pup to leave his mother, brothers and sisters for the first time. But add to the strangeness by introducing him into a festive holiday group, complete with excited children who want to fondle him none too gently, and his new life will get off to a very bad start. Even if he has already been housebroken, chances are he will disgrace himself. It may well be that he will also get sick to his stomach. And he will probably cry all night.

According to a booklet on the Care and Training of Puppies, prepared as one of a series of five by the Pard Department of Swift and Company, there are some suggestions on bringing home a new puppy that hold true at any time and should be heeded even more firmly at Christmas time. "Try to keep the children away from him for 12 hours," says the booklet, "when much of the strangeness will have worn off. Don't pet him much until he comes to you. You can put water down for him after the first hour, but don't feed him for at least four hours."

If the puppy arrives with Santa, when the whole family is around the tree, it will be almost impossible to follow these rules, but if he is brought into the home a few days before Christmas and has a chance to get to know and trust the new surroundings and the new people, he, too, will be able to enjoy a very Merry Christmas. More than that, he will have a happier, healthier start as a well-behaved companion throughout a long and friendly life.

THE TIME WAS 1772, the place, Scotland, on the north of the River Tweed. A prominent young farmer, Alexander Murdison, was summoned to the Court of Justice in Edinburgh. John Millar, his shepherd, was also called before the bar. The charge: repeated thefts of large numbers of sheep. Deeply implicated was the shepherd's dog named Yarrow.

Murdison and his shepherd, it was revealed at the trial, had been quietly stealing sheep from their neighbors for years with a diligence, perseverance and success that was astonishing. Their mysterious system depended entirely on the amazing aid of Yarrow.

Yarrow would go at night and by himself to a neighbor's farm, and there would quietly detach certain sheep previously pointed out by his master. These he would drive home without allowing one to stray. Sometimes he worked together with his master, and man and dog, while returning home with the stolen sheep, would furtively avoid the road along the river banks. But if they sensed danger, Millar would leave the dog and take the road. And Yarrow, though several miles separated from his master, would continue with silence and care to bring the sheep onward to his home. Once, Millar had to leave the dog because daybreak was overtaking them. Yarrow persevered until the advancing day warned him that he, no more than his master, could afford to be caught in company with stolen sheep. He then left them and returned home alone.

Murdison and Millar were hanged in the Grass Market of Edinburgh, and their bodies exposed on the gibbet. And Yarrow? Tradition has it that Yarrow was hung along with his master. Whether or not this is picturesque fiction, there is a feeling even today that the dog was as guilty as the men.

* * *

In Gravesend, England, a driver was acquitted of reckless driving after a police officer found 14 women riding in his car. But the judge fined him five pounds ($14) for letting a dog ride on the hood.

* * *

In Ardmore, Oklahoma, Herman Jackson told officers he was shot in the chest by his own gun when his dog stepped on the trigger of the gun in the back seat of his car. ●

muzzle flashes

By EDMUND McLAURIN

IN LINE WITH the magazine's policy of serving sportsmen-readers in every helpful way possible, FLORIDA WILDLIFE's gun editor has been making personal replies to letters received outlining encountered firearms' problems, or seeking specialized information.

But because some of the inquiries indicate general reader interest in certain subjects, and because editorial treatment would be advantageous, a few questions are being given detailed editorial presentation this month. Others will be published in the magazine and answered editorially from time to time . . . .

QUESTION:

In one of your recent articles on handguns you wrote interestingly of the small game hunting sport to be had from converting old .38, .45 and .44/.30-40 revolvers for shot shell loads. Your article mentioned that such conversions would not be in conflict with Section 2733 (a) of the U. S. Treasury Dept., Internal Revenue Service IR Bulletin No. 19, dated May 10, 1954. Some of my friends say that such sporting handguns are illegal. What's the true story?

ANSWER:

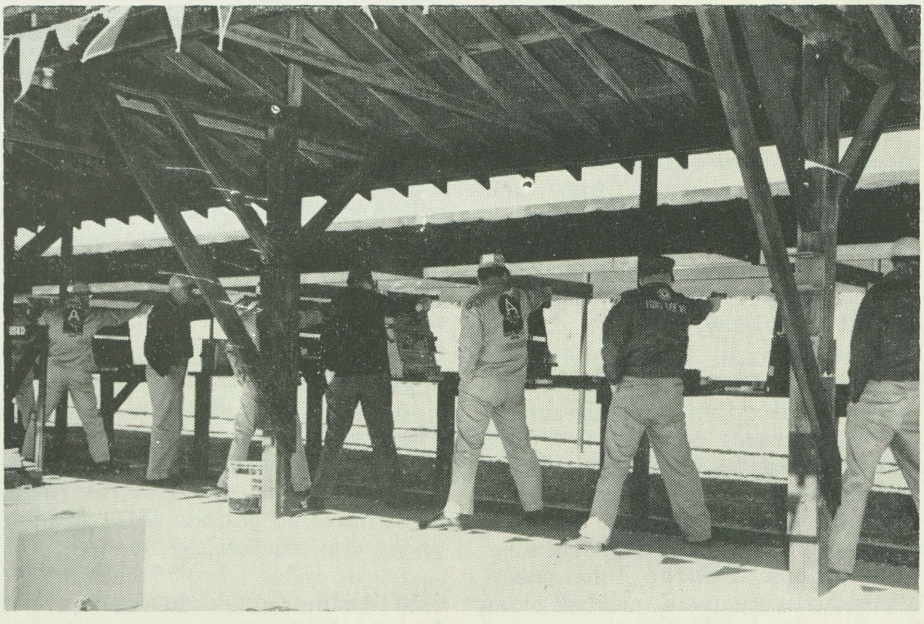
First of all, let me say that I wrote on the conversion of old revolvers to shot cartridge use as sporting firearms of limited range and power and definitely foreign in application to defense weapons of the sawed-off shotgun class— and I wrote in good faith.

In the Spring of 1955 I wrote the National Rifle Association about the technical phases of converting old revolvers to handle shot shells, loaded to kill small game and unprotected birds at range under twenty-five yards. I was given detailed instructions for doing such work and also supplied with the addresses of nationally-known gunsmiths making such conversions for use by law-abiding sportsmen. Further, in the June 1955 issue of the AMERICAN RIFLEMAN MAGAZINE, official publication of the National Rifle Association, there appeared on Pages 41 and 42 instructions for converting certain revolver models to use shot cartridges. On Page 42, in support of the legal angle of such conversions, the NRA made an outlined "box" comment that closed with the following statement: "The alteration of .38 and .45 caliber revolvers by the removal of the rifling from the barrel and the use of standard revolver casings, hand loaded with shot instead of the customary lead projectiles, does not remove such weapons from the classification as revolvers. They are not firearms within the meaning of Section 2733 (a) of the Internal Revenue Code—Ruling by the U. S. Treasury Dept., Internal Revenue Service, IR Bulletin No. 19, dated May 10, 1954."

When I prepared my hunting with a handgun article, which included mention of the possible sport to be had from use of a shot shell revolver for short range shooting, I phoned a local office of the U. S. Treasury Dept. and read from my file and the interpretation carried on page 42 of the June, 1955, AMERICAN RIFLEMAN. I was advised that there had been no change in the status, and that the law had never been considered applicable to sportsmen.

However, it seems that the printing of the how-to-do-it revolver conversion article in the AMERICAN RIFLEMAN, and my own casual mention of the possibilities of hunting small game with an old revolver converted to handle shot cartridges, sent some overly zealous Federal officials rushing to the law books to see if they could find some statute of prohibitory interpretation and application. Despite the fact that the U. S. Treasury Department had definitely ruled that such revolver conversions are not firearms within the meaning of Section 2733 (a) of the Internal Revenue Code, some officials now feel that Federal Law No. 5841, I.R.C., of 1954, prohibiting shotguns less than 18" of barrel length takes precedence, irrespective of the fact that a converted revolver, chambering and firing shot shell loads, is still a revolver and not a shotgun!

The National Rifle Association and Federal officials are conferring on the true legal interpretation as this is written, with the NRA taking the sportsmen's side. As soon as a ruling is made, both the National Rifle Association and FLORIDA WILDLIFE will advise interested persons.



Shooting tournaments, like the annual Tampa Mid-winter, are popular and are held regularly in many states. To attend them, shooters frequently have to cross state lines carrying handgun equipment in special luggage-type trunks, often in technical violation of existing pistol laws concerning concealed weapons. Such laws should be revised, to provide for the interests of law-abiding sportsmen handgun enthusiasts, FLORIDA WILDLIFE'S Gun Editor believes.

Laws relating to firearms are too many and too complex and too many different people give them individual interpretation. In Section 790.05 of the Florida statutes reference is made to the case of Watson v. Stone (148 Fla. 516, 4 So. 2d 700) in which the Florida Supreme Court ruled that it is legal to carry a pistol in the glove compartment of a car without a permit, but not on, under, or behind the car's seat. Yet a national outdoor magazine, recent carrying a resume of state laws applying to handguns, stated that a permit is needed! The law-abiding, target shooting class of handgun owners are generally not challenged, but as long as laws are vague or in conflict there will be contemporary vague and perhaps challenging opinions—like trying to classify shot firing revolvers as weapons of the sawed-off shotgun class!

QUESTION:

I have a beautifully grained rifle stock I'd like to photograph. What are your recommendations for obtaining a satisfactory photograph?

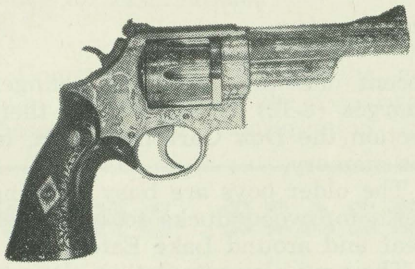
ANSWER:

A combination of proper background, good lighting of the subject and accurate close-up foscusing is called for if you want to show the fine lines and close grain of a rifle stock in a finished photo.

Use fine grain panchromatic film and a close-up focusing, ground glass viewfinder camera, preferably; you can't expect to get fine detail with an ordinary fixed-focus camera six feet from your subject, although some fixed-focus cameras and portrait attachment slip-on lens will do creditable work.

Mount the rifle on small wood dowel pegs or L-shaped metal hooks, against a light buff colored background. Arrange two or three photoflood lamps until you have even, flareless lighting without heavy shadows. (An extra, hand-held photoflood lamp in a reflector will help put extra light wherever it may be needed.) Take an incident (from subject to camera) light reading with an accurate exposure meter, for correct lens opening and corresponding shutter speed. Make one photo at the recommended exposure, another with slightly less and a third with slightly more, to be sure that you get the picture after all your work of "setting up" the subject.

A Kodak Wratten K2 yellow filter, and a red filter of No. 25 Kodak designation, will help bring out the beauty and detail of the



A combination of proper background, good subject lighting, accurate close-up focusing and advance job planning is necessary in the making of satisfactory photographs of guns. Detail can frequently be enhanced through the judicial use of yellow and red filters and panchromatic film.

stock's natural wood grain, especially if the stock has a slightly reddish hue. Make one exposure without a filter; then make one or more with each of the named filters. You will readily see the tonal difference in the finished prints when you lay them side-by-side for comparison.

These suggestions are for the average amateur photographer. A professional might tackle the job altogether differently, and possibly with better results. Also, if you outline your photographic plans to the Eastman Kodak Company, Rochester, New York, that firm's Service Bureau will give you free technical advice.

QUESTION:

I have a chance to buy a private collection of guns, representing an estate being liquidated. The listings comprise two heavy barreled target rifles of .32-40 caliber and of Ballard action, bearing the name of H. M. Pope in fine letters on the barrels: a .35 caliber Remington Model 81 "Woodsmaster" autoloading rifle; a Marlin 39 .22 caliber rifle with a very low serial number; a Remington Model 12 pump-action .22 caliber rifle with a Winchester 5A scope sight; a .30-40 Krag bolt-action, box magazine loading, rifle, and a Kentucky flintlock rifle, caliber unknown, marked with the name of J. Y. Henry. All are in perfect condition. The widow of their owner wants one thousand dollars (1,000) for the lot. Do you think the listings worth the money?

ANSWER:

Hard to say. A lot depends on how much the guns are worth to you personally as owned items; their re-sale value is something else.

Most valuable of the listings (provided they are genuine and in excellent to perfect condition) are the two target rifles bearing the name of Harry M. Pope, the famous rifle barrel-maker, and the described Kentucky-style flintlock. Rare indeed are genuine Pope-barreled rifles and J. Y. Henry Kentucky flintlock creations. They may be worth considerable money to persons who specialize in collecting these genuine works.

But all the other listings are of questionable current and practical value, since they represent obsolete models of little interest to collectors and of limited practical usefulness to the active shooter. The low-serial numbered Marlin 39's were manufactured prior to the development of high pressure, high speed. 22 caliber ammunition, and some of the early actions may "blow"—especially the ejector parts— if modern ammunition is used in them. The Remington Model 81 "Woodsmaster" was the heavy, recoiling barrel autoloader Remington marketed for so many years for big-game hunting. It has long since been succeeded by improved versions, of which the Remington Model 740 is acme in smooth, fast-firing performance through a streamlined action and recoil-less barrel. Similarly, the Remington Model 12 pump-action .22 with the Winchester 5A scope sight may be considered obsolete. The 121 "Fieldmaster" is the modern version, and the cheapest of modern telescopic sights and combined mounts represent an improvement over the old, high-mounted Winchester 5A scope sights. The old Krag was our military rifle before the Springfield Model 1903.

All the rifles you describe were good in their day, but their age has passed. Unless the genuine Pope-barreled rifles and the old Kentucky flintlock aggregate a thousand dollars in value, to you and to the firearms market, I'd pass up the opportunity to buy. ●

JUNIOR CONSERVATIONIST

By DENVER STE. CLAIRE

A MOST HAPPY and eventful year to you in your own interests and those of conservation. This of course also includes lots of good camping and fishing wherever you are.

Plans are already in the making for next summer's camp, which we hope will operate from two to four weeks longer this year.

The number of weeks of camp this year depends on *YOU*.

Filling our camp each week with our quota of 100 is the answer for a longer summer program.

* * * *

By this time you have read the December issue of FLORIDA WILDLIFE Magazine. You will have noticed the Fifth Series of the Conservation Projects for the Merit Point System.

We sincerely hope that all of you are making plans to work on some of these projects.

* * * *

Around The State:

The Leesburg Junior Wildlife Club has just elected a new slate of officers—President, John Beatly; Vice President, John Gray; Treasurer, Bill Bays and Secretary, Chuck Reeves.

Advisors for the club are Ed Richey, Russ Rogers and Brunsen Gibson.

* * * *

The Allapattah Junior Conservation Club reports they have just recently helped their Senior sponsoring group—the Optimists—to conduct a beauty contest to select a Queen for the kick-off dance they had at the Miami Springs Country Club, November 10.

P. S. Their Queen is Rosemarie Meeks.

* * * *

The Bartow Junior Conservation Club reports that the offices of vice president and treasurer are to be filled.

Hugh Burgess has been nominated for vice president and John Peacock for treasurer.

* * * *

The Ocala Dean Mather Club at a recent meeting of their younger charges (8-12) voted to name their section the Don Carroll Section, in his memory.

The older boys are busy building nests for wood ducks to be placed near and around Lake Eaton.

They are also completing plans to print or mimeograph their own bulletin. David Laird, Secretary, instructs me to ask any of you who have an unusual story or news interest relative to conservation to write to him at P. O. Box 190, Ocala, Florida.

* * * *

The Stuart Junior Conservation Club reports it is now showing a film every other week at their meetings. All films deal with conservation and wildlife.

* * * *

The Bay County Girls Junior Conservation Club in Panama City report a very successful exhibit at their county fair. What with their exhibit, a live fawn, literature, and selling FLORIDA WILDLIFE Magazines, they had a perfect setup.

Donna Hazen, their Secretary, writes that Charlene Pledger is now Mrs. Paul Musgrove and resides in Miami where they will both attend the University of Miami.

(Ed. Lots of luck to you both, Charlene and Paul. That's from all of us.)

* * * *

Bartow—Johnny Hutto, Secretary of the Club, writes and tells us they have rented a sanding machine for their floors in the club house. When this is finished, the floors will be varnished.

(Note: If you are ever passing through Bartow, try and visit their club house—it is quite an achievement for a group of young men and their advisor.—B. L. Timmons).

Lonnie Laurence, past president of the club, represents their interests in conservation by having been appointed to the Polk County Conservation Committee. Best to you, Lonnie.

Eustis Junior Conservation Club—Good news from this section. Tommy Anderson announces that after a period of over a year without an organizational sponsor, two groups are now interested, the Eustis Rotary Club and the Presbyterian Men's Club of Eustis.

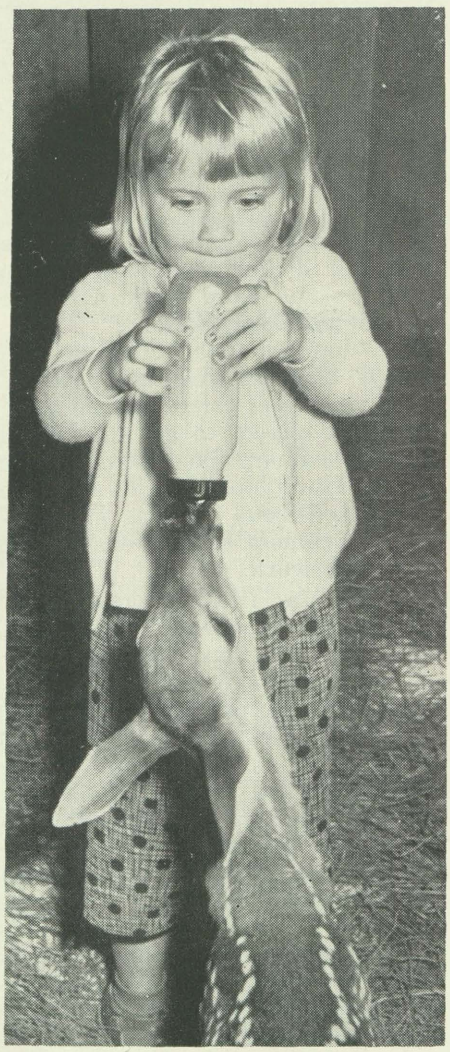
Tommy has been going this single handed and needed help. I'm happy to hear that there is a renewed interest in these quarters.

* * * *

Orlando—During the month of October, on the 30th day, I spoke to the Women's Garden Clubs of District No. VII. The Film, "Sportsmen of Tomorrow", was shown first and then followed by my talk. These Garden Clubs are most interested in conservation and our Youth Program.

* * * *

If any of you are not in contact with the Garden Clubs in your



Four year old Cindy Emery of Tallahassee gets a thrill out of bottle feeding a two month old fawn at the Commission's North Florida State Fair exhibit. The fawn, picked up by a well-meaning but uninformed construction worker at Eglin Field, was confiscated by Wildlife Officers.

—Photo by Jim Floyd.

various cities, I suggest you do so as soon as possible. They are willing to assist you in many ways.

* * * *

The Allapattah Junior Conservation Club's Secretary, Lloyd Johnson, writes and reports that Henry Imhauser is the new president; Jack DeOgburn, vice president; Tommy Jerguson, treasurer; and Bobby Greenburg, Sgt. at Arms.

Ronnie Stokes, Releigh Albury, Don Miller, with Phil Alexander, Chairman, are on the Board of Directors.

"How To Organize a Junior Conservation Club," a new booklet will soon be available for adults and organizations interested in the Youth Conservation Education Program of the Game and Fresh Water Fish Commission.

* * * *

Camp applications for 1957 are also available. Please write to this office for reservations.

* * * *

Commendation: During the annual convention of the American Association for Conservation Information, the committee on awards, gave a special commendation for Florida's field work in Conservation Education for Youth.

* * * *

Don't forget to write to Lloyd Johnson for placing an article in the CLAW Bulletin; and don't forget to write to me at 205 West Adams, Ocala. Let me know how your club is making out.

And those of you in Boy Scout or Girl Scout work, drop us a line if we can give you assistance of any kind. That goes for 4-H and F.F.A. club counselors too. ●

EARLY HUNTING SEASON REPORTS

Panama City, Nov. 27—Hunters participating in the special hunts within the Wildlife Management Areas located in Northwest Florida have reported the taking of 324 deer during the first five days of the 1956-57 hunting season.

The largest deer reported to date was a 234 pound 12 point buck killed on the Gaskin Area. The deer was taken on Thanksgiving Day by Ira Ross of Panama City.

Lothair Chester, hunt director of the Liberty Area reports that hunters have killed 593 squirrels in addition to 21 deer.

According to Matt Whisenhunt, Game Management Technician, a total of 272 deer have been reported taken by hunters in the Eglin Management Area. Whisenhunt stated, however, that the estimated kill for this area is set at 350.

To date, 21 deer, averaging out at 168 pounds, have been killed on the newly established Leon-Wakulla Management Area. During the first six days of hunting on the Aucilla Area, approximately 1,000 hunters accounted for a total kill of 25 deer, 16 turkey, 32 quail, 1,375 grey squirrel and 160 ducks.

Les Libby, hunt director of the special St. Marks Refuge waterfowl hunts, reported that through November 17, a total of 109 geese and 34 ducks had been bagged.

* * * *

Okeechobee, Nov. 26—Game Management Areas in the Everglades Region have filed the following kill reports for the first six days of the present hunting season:

Collier Management Area, 313 turkey, 48 deer, 241 squirrel, 11 duck, 5 coot, 17 wild hogs and 226 quail. The J. W. Corbett Management Area reports 14 deer, 18 turkey, 28 hogs, 600 quail and 12 ducks. Kill record for the Big Cypress Swamp was 94 turkey and 22 deer, and for the Okeechobee Area, 3 deer, 10 turkey, 622 quail and 23 ducks.

* * * *

OCALA, Nov. 26—Hunters in the Ocala National Forest are enjoying a very successful hunt according to Don Strode, Forest Hunt Director.

A doe deer having antlers with three points and in full velvet was killed by a Wildwood party in the north end of the forest. Strode stated this was the third antlered doe killed in the Ocala Forest in the past few years.

When a doe with legal-size antlers is killed, the officers handle it as a legally killed buck and check it to the hunter.

The acorn and cabbage berry mast is the best it has been in years. This heavy food crop has produced large, fat deer with good antlers.

Strode reported a drop in the number of hunters, but the deer killed is about equal to that of the first week last year.

Kill reports for the Game Management Areas in the Central Florida Region for the period November 20 through November 25, 1956, are as follows:

Ocala National Forest—379 deer, 17 turkey.

Tomoka Management Area — 14 deer, 7 turkey.

Farmton Management Area — 41 deer, 36 turkey.

Sumter-Citrus Management Area —65 turkey, 2529 cat squirrel, 46 quail, 288 duck, 40 coot.

Richloam Management Area — 9 deer, 17 turkey, 644 cat squirrel, 65 quail, 10 duck.

Holopaw Management Area — 1 deer, 2 turkey, 150 quail.

Croom Management Area — 25 deer, 14 turkey, 700 cat squirrel, 30 quail, 10 duck.

LAKELAND, Nov. 26 — Hunters bagged a large amount of game the first six days of the hunting season according to reports from the Wildlife Management Areas hunt directors.

The South Florida Region of the Commission has six Managed Hunts within the thirteen counties comprising the region. The break down of the kill results by hunt areas are as follows: Croom Wildlife Management Area, 25 deer, 14 turkey, 700 cat squirrels, 50 fox squirrels; Richloam Area, 9 deer, 17 turkeys, 635 cat squirrels; Fisheating Creek Area, 269 turkeys, 3172 quail, 648 cat squirrels, 27 fox squirrels, 70 ducks; Avon Park Area, 12 deer and 67 turkeys; Lee Management Area, 9 turkeys, 580 quail, 19 fox squirrels and 38 ducks; Webb Management Area, 2494 quail.

* * * *

LAKE CITY, Nov. 26 — Reports of excellent hunting results during the first six days of the 56-57 hunting season have been sent in from the Public Hunt Areas in Northeast Florida.

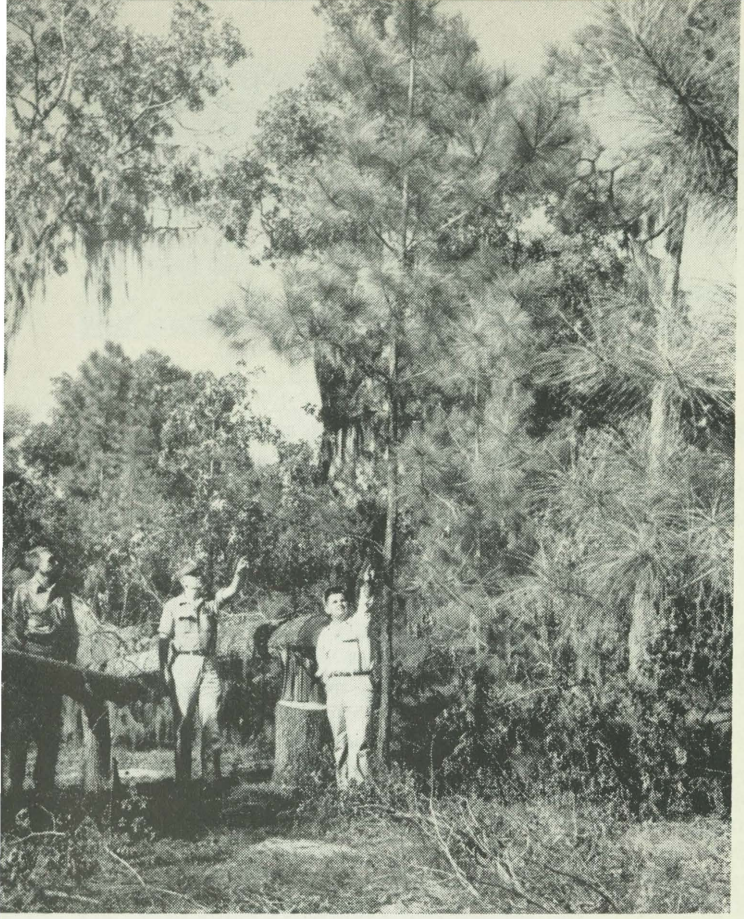
The Gulf Hammock Area had a reported 1275 hunters during the first six days with a total kill of 95 deer, 105 turkeys, 2670 squirrels, and 125 ducks.

John Croft, hunt director for the Osceola Management Area reports better hunting results there than last year with 41 deer killed in the first 5 days (no Sunday hunting).

The newly opened Camp Blanding Wildlife Management Area produced 9 deer and 9 turkeys during the first six days of hunting.

Hunt director Doyle Walker reported 1899 hunters on the Steinhatchee Management Area with a game kill of 31 deer and 64 turkeys for the first 6 days. ●

T. S. I. and Wildlife Habitat



Bob Wiese (left) Ass't Ranger, Lake George Ranger District looks on as G&FWFC Biologist Don Strode and Tom Tobin (right) of Lake George Ranger District discuss a T.S.I. project. On the Ocala National Forest T.S.I. areas a predetermined number of oaks and other wildlife food producing trees are left untreated. —bh—

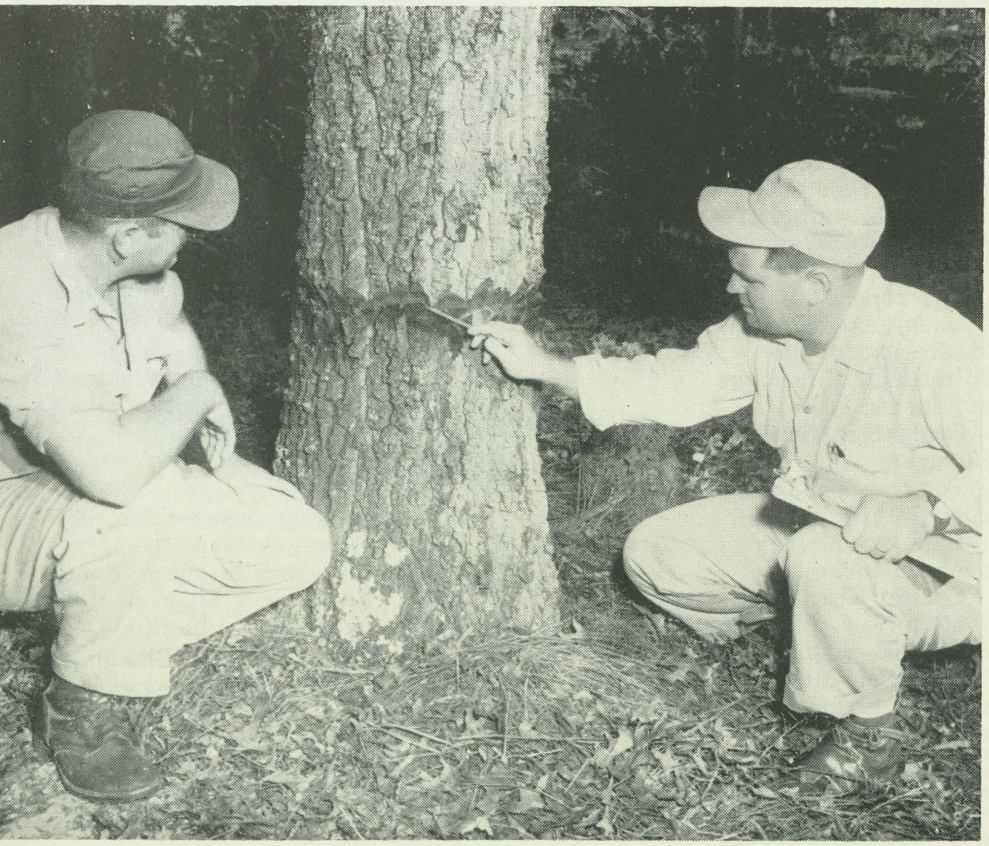
a preliminary report

By DON STRODE

DURING RECENT YEARS, with the trend toward more intensive management of commercial timber stands, there has developed a technique which poses a potentially serious threat to large portion of Florida's wildlife habitat. This phase of forest work, Timber Stand Improvement, or T.S.I. as it is more commonly termed, involves the elimination of trees other than those of commercial value from areas being utilized for the production of timber. The purpose of this operation is to remove "weed" trees growing in competition with commercially valuable species.

In the Ocala National Forest, some timber stand improvement work has been conducted, mainly on an experimental basis. Upon the suggestion of the Game and Fresh Water Fish Commission and Ranger John Olson of the U. S. Forest Service, a study of the effects of such T.S.I. activities was initiated.

On the Ocala, the greatest amount of T.S.I. work has been conducted on longleaf pine habitat sites, and it was in these areas that most of the study was concentrated. Here, T.S.I. operations consisted of either girdling and poisoning with 2, 4, 5-T or cutting down and poisoning undesirable commercial species for the purpose of releasing longleaf pine seedlings. The undesirable trees were treated only if they were in competition with pine seedlings. Undesirable species were considered in competition with longleaf pine seedlings if in good sites they overtopped the seedlings, and if in poor sites, such as in scrub oak and deep sand, they were closer than their height



Biologist Strode (left) and Tom Tobin of the U.S. Forest Service examine a girdled and poisoned oak on a T.S.I. plot in the Ocala National Forest. —bh—

to the desirable seedling. Most of the trees cut down or girdled were turkey oak (*Quercus laevis*), live oak (*Q. virginiana*), and upland willow oak (*Q. cinerea*). The T.S.I. crews were given instructions by the U. S. Forest Service to leave untreated at least four mast producing oaks per acre for game food trees and also to leave den trees.

In order to measure any effects of this program upon the wildlife habitat, it is important to determine just how many potential acorn producing oaks had been destroyed, and how many had been left. Acorns are recognized as excellent food for deer, turkey, squirrel, and quail. In this case we are primarily interested in deer food as this is the only game species found in large numbers in the longleaf pine areas of the Ocala National Forest.

Lines were run on a compass bearing, on which at 150 foot intervals plots one chain square (1/10 acre) were intensively studied to determine the number of oak trees per acre, the number girdled, the number cut down, and the area in square feet covered by the oak crowns. Only those oaks measuring 4-inches or more in diameter at breast height (DBH—approximately 4-feet above ground level) were tallied since the turkey oak, the common oak in the longleaf pine area, seldom produces a mast crop when smaller in diameter than this. On each line a total of ten plots, or one acre, was studied intensively. Twenty-five of these compass lines were run, making a total of 250 plots or an area of 25 acres studied. The sample areas were selected at random, but an effort was made to run some in heavy stands of oaks, some in thin stands, and some in moderately thick stands.

The majority of the T.S.I. work was done in March, April, and May of 1955, although 30 plots were studied from an area T.S.I. treated in the spring of 1953. This study was conducted in August of 1955 and April of 1956.

The totals for all the study areas showed an average of 28.2 oaks per acre. Of these, 5.9 were girdled and 3.5 cut down or an average of 9.4 oaks per acre treated in the T.S.I. area. There were found to be 18.8 untreated oaks per acre in the T.S.I. area.

In order to obtain a better understanding of this problem, the study areas were divided into various units depending upon the number of oaks per acre. These units were areas with 1-10 oaks per acre, 10-20 oaks per acre, 20-30 oaks per acre, 37-50 oaks per acre, and 65-97 oaks per acre. Obviously there would be a greater effect upon the game habitat if 50 percent of the oaks were destroyed in an area with only four oaks to the acre than if 50 per cent of the oaks were destroyed in an area with 50 to the acre.

1-10 Oaks Per Acre

Examination of the figures from these areas showed an average of 7.8 oaks per acre. Of these, 4.4 were girdled and 0.6 were cut down for a total of five trees per acre T.S.I. treated. Subtracting the five treated trees from the average of 7.8 oaks per acre leaves 2.8 untreated trees per acre. Sixty-four per cent of all oaks were either cut down or girdled in this group. A total of 50 plots or 20 per cent of the plots studied fell into this group.

Many of the oaks were large, having at least a 10-12 inch DBH. This is important in this study, because large oak trees growing in fairly open country have large crowns and tend to produce heavier mast crops than smaller trees growing under more crowded conditions.

The average oak crown covered 320.4 square feet. With 7.8 oaks per acre this gives a total of 2,499 square feet or 5.7 per cent of the area per acre utilized by oaks. It should be pointed out that the root system covers a larger area than the crown in the dry sand soil present in the area, and one oak may actually require a larger growing area than the diameter of the crown. After T.S.I. treatment 2.8 oaks were left, which utilized two per cent of the area. The T.S.I. treatment in this area reclaimed 1,602 square feet per acre or 3.7 per cent of the area. If the radius of the crown of an average longleaf pine growing in a moderately heavy stand is ten feet, the T.S.I. treatment in this area would allow growing space for approximately five more pine trees per acre. Considering that the growth cycle of the longleaf pine is 120 years and that the average mature tree would bring approximately 20 dollars, an increase of 100 dollars in saw timber would be produced. This amounts to 83 cents per acre per year increase in saw timber production due to the T.S.I. program. Undoubtedly some thinning for pulpwood would be carried out through the years, but the author doubts if this would increase the timber production income to above one dollar per acre per year in this type of area.

10-20 Oaks Per Acre

Results from the plots checked in these areas showed an average of 15.4 oaks per acre. Of the 15.4 oaks present, 5.8 were girdled and 1.6 were cut down for a total of 7.4 oaks per acre T.S.I. treated. Subtracting the 7.4 treated trees from the 15.4 oaks present leaves eight trees untreated per acre. Forty-eight per cent of all the oaks were either girdled or cut down in this 10-20 oaks per acre group. Fifty plots or 20 per cent of the total plots studied fell into this group.

Oaks utilized 10.7 per cent of the area per acre in this group. After T.S.I. treatment 5.5 per cent of the area was utilized by oaks. A total of 5.2 per cent of the area per acre was reclaimed by T.S.I. treatment.

(Continued on Next Page)

Assistant Ranger Tom Tobin examines a pine seedling in the "grass" stage. Suppressed by the proximity of the oak at the left, this tree will remain in the grass stage for several years unless released by removal of the oak. Multiple use of forest lands includes consideration of wildlife as well as timber production values. —bh—

Henry P. Heinemann, T.S.I crew foreman on the Ocala National Forest, stands by as crewman Oley Bennett operates the chain saw to fell an oak. —bh—

T.S.I. crewman Buford Yarbrough applies 2,4,5-T herbicide to fresh oak stump to prevent sprouting. —bh—

(Continued From Preceding Page)

20-30 Oaks Per Acre

An average of 25 oaks per acre was found in this group. Of the 25 oaks, 6.7 were girdled and 1.6 were cut down. An average of 8.3 oaks per acre was T.S.I. treated. Subtracting the 8.3 treated trees from the 25 oaks per acre leaves 16.7 untreated oaks per acre. A total of 33.3 per cent of all oaks was either girdled or cut down in this 20-30 oaks per acre group. Seventy plots or 28 per cent of the total plots studied fell into this group.

Oaks utilized 14.3 per cent of the area per acre before T.S.I. treatment and eight per cent after treatment. Six and three-tenths per cent of the area per acre was reclaimed by T.S.I. treatment.

It should be pointed out at this time that as the number of oaks per acre increases there is an increasing number of oaks smaller than 4" DBH growing in the stand. Although these oaks are not counted in this study, they do take considerable growing space. These smaller oaks are not included in the figures given for per cent of the area utilized by oaks in this report.

37-50 Oaks Per Acre

An average of 42 oaks per acre was found in this group. Of these, 6.6 were girdled and nine were cut down, giving an average of 15.6 oaks per acre T.S.I. treated, while 26.4 were left untreated. A total of 37.4 per cent of all oaks was T.S.I. treated in this 37-50 oaks per acre group. Sixty plots or 24 per cent of the total plots studied fell into this group.

A large increase in the number of trees cut down can be noted in this group. This is due to the fact that in the thicker oak stands the trees become more crowded and smaller. Cutting down is the usual T.S.I. treatment for oaks four to five inches DBH.

Oaks utilized 15.5 per cent of the area per acre before T. S. I. treatment and 8.3 per cent following treatment. Seven and two-tenths per cent of the area per acre was reclaimed by T.S.I. treatment.

65-97 Oaks Per Acre

Results from the plots checked in these areas showed an average of 81 trees per acre. Of these 81 oaks, 5.5 were girdled and 5.5 were cut down for a total of 11 oaks per acre treated, and 70 oaks untreated. A total of 13.6 per cent of all oaks was T.S.I. treated. Twenty plots or eight per cent of the total plots studied fell into this group. Very little T.S.I. work was done in these areas due to the dense stands of oaks present and the lack of pine reproduction within the area.

Oaks utilized 19 per cent of the area per acre before T.S.I. treatment and 16.4 per cent after treatment. Two and six-tenths per cent of the area per acre was reclaimed by T.S.I. treatment. The author would like to point out that the area utilized by oaks in this study denotes the area covered by the crown and does not necessarily include all the area utilized by oaks due to their extensive root system in the dry sandy soil present.

The number of T.S.I. treated oaks in this group was smaller than in the 37-50 oaks per acre group. As the oak stands become thicker, it is harder for the longleaf pine seedlings to get a start. In heavy oak stands there is little or no longleaf pine reproduction.

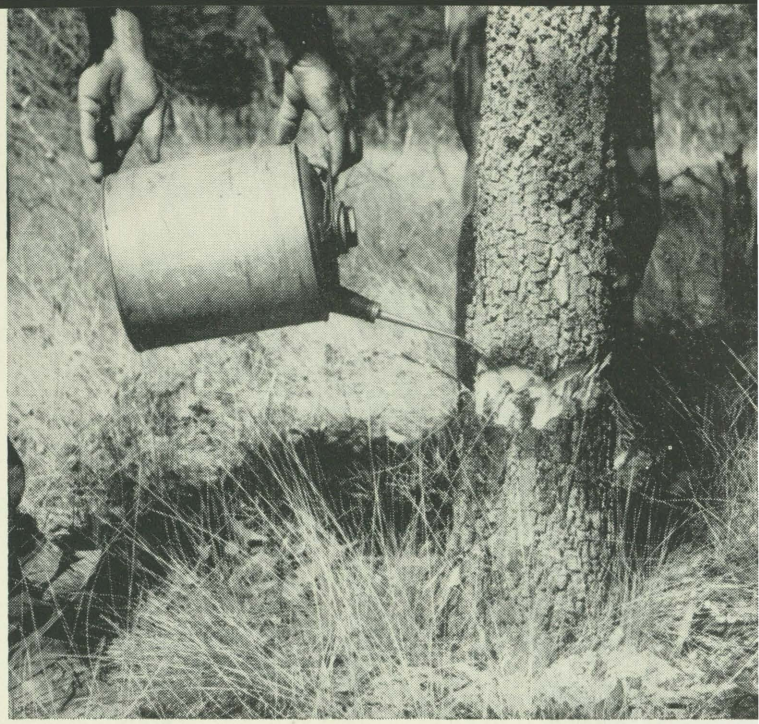
TABLE 1. AREA PER ACRE UTILIZED BY OAK CROWNS

Group (Oaks Per Acre)	*Before T.S.I. Treatment* Sq. Ft. Covered	% Acre	*After T.S.I. Treatment* Sq. Ft. Covered	% Acre
1-10	2,499	5.7	897	2.0
10-20	4,645	10.7	2,412	5.5
20-30	6,255	14.3	3,507	8.0
37-50	6,745	15.5	3,621	8.3
65-97	8,262	19.0	7,140	16.4

TABLE 2. SUMMARY OF T.S.I. PROGRAM IN LONGLEAF ISLAND HABITAT TYPE IN THE OCALA NATIONAL FOREST

Oaks Per Acre	*Av. No. Oaks Per Acre*	*Av. No. Oaks TSI Treated Per Acre*	*Av. No. Oaks Left Untreated*	*% Oaks TSI Treated*	*No. Plots Studied*
1-10	7.8	5.0	2.8	64.0	50
10-20	15.4	7.4	8.0	48.0	50
20-30	25.0	8.3	16.7	33.3	70
37-50	42.0	15.6	26.4	37.4	60
65-97	*81.0*	*11.0*	*70.0*	*13.6*	*20*
TOTAL	28.2	9.4	18.8	33.3	250

Henry Heinemann "frills" oak in typical T.S.I. operation. —bh—



Application of 2,4,5-T herbicide to frilled oak will kill the tree. Management of forest lands for production of both wildlife and timber are included in multiple use programs. —bh—

Acorn Producing Pattern of Oaks in Longleaf Pine Area

Fortunately for the game the various oaks species produce their acorns during different months of the year. Acorns first become available during the month of September and may be used as late as February or March the following year. Thus it is possible to have acorns available as food for a six months' period.

The live oak is the first to drop its acorns which are very important as they provide a valuable food just prior to the rutting season when deer need to be in good condition. Following the live oak, the upland willow drops its acorns. The last species to drop its acorns is the turkey oak. These acorns are very valuable as they provide food through the winter months when other food may be scarce. Deer are quite fond of the turkey oak acorns, preferring them to the other acorns present in the area.

Only the three large major oak species have been discussed here; a few minor species present will not be included. Of the three oaks discussed, the live oak and the turkey oak are more valuable as a game food tree than the upland willow oak.

T.S.I. Program in Hardwood Swamp Area

Besides the T.S.I. program carried on in the longleaf pine habitat, a small amount of T.S.I. work was done in a hardwood swamp area. For the purpose of this paper the river hammock type has been included under the term of hardwood swamp area. At the time of this writing only a very small acreage had been treated. The T.S.I. program followed logging operations in the area.

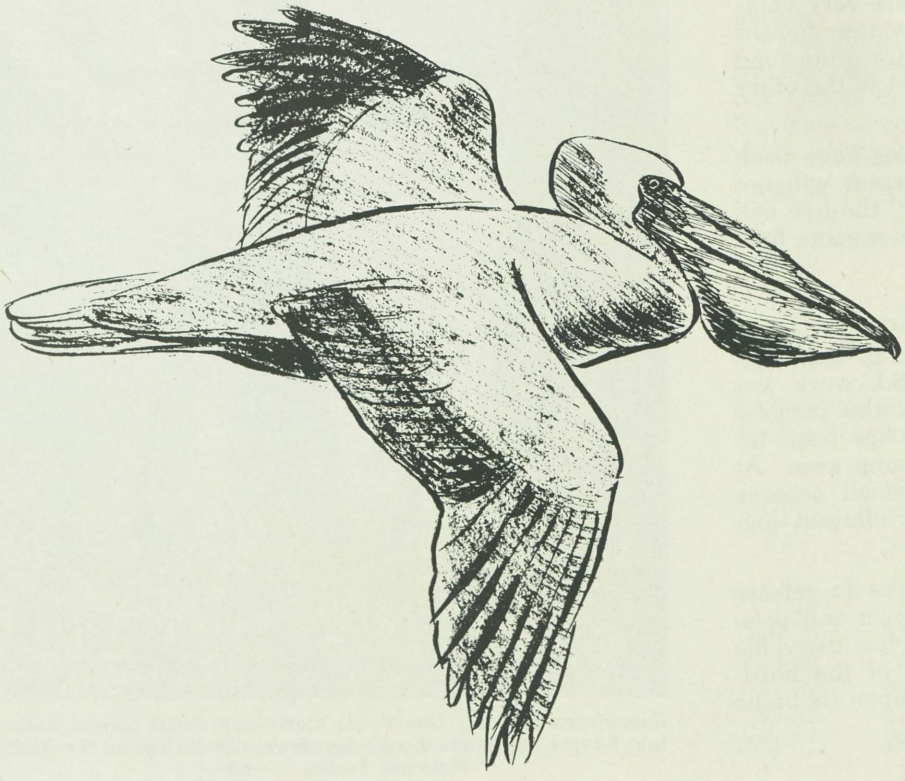
The purpose of this T.S.I. program was to release valuable hardwood species by cutting down and poisoning and by girdling and poisoning the less desirable species of hardwoods. The desirability of the hardwood species in this program depended upon its value

(Continued on Page 41)

Commission Biologist Don Strode (left) and Forest Service Assistant Ranger Bob Wiese discuss deer browse conditions on the Ocala National Forest. —bh—

MARVELS of the ANIMAL WORLD

By ROSS PHARES



TO KNOW ANIMALS is to marvel at their fantastic capacities. No true naturalist pities the wild creatures, but often envies their extraordinary fitness. For every need, no matter how singular, a generous nature has provided ingeniously. Not one, even to the most insignificant insect, has been short-changed.

Most meat-eating creatures have teeth or claws to rid flesh of bones. But those that don't have this equipment eat boned meat just the same. A kingfisher, for example, possibly considers his way of eating meat much easier than the conventional, tedious method of picking bones. He simply swallows his food whole without any regard for bones. His digestive system obligingly takes off the food it can use, and sends back up the unusable bones, which are employed for constructing nests. His watery and shaded habitat, and the element of time, does not permit him to bleach or otherwise process the bones. Thus the odor that emanates from a kingfisher's nest is no compliment to its fastidiousness. But what a convenience to swallow room and board at the same time!

For every apparent handicap a kind nature seemingly provides a compensating advantage. The sloth, an awkward little animal of the tropics that walks upside down in trees, is too slow to run from enemies, and is virtually without fighting or protective equipment. It survives by come-back power—its uncanny ability to take abuse. If a cat has nine lives, the sloth would appear to have nine times nine. They have been known to recover after the suppression of respiration for 30 minutes, and to suffer no permanent damage after 40 minutes immersion in water. One survived for 30 minutes after decerebration.

A chameleon may be just a lowly reptile, but it has everything it takes—for a lizard. It goes hunting with its habit blending perfectly with every setting, regardless of the changing scenery. It is so well camouflaged its prey are in striking distance before they see the lizard. And if it lies still its enemies may walk over it without seeing it. As a hunter it is superbly equipped. You may see a fly a foot from the chameleon's nose. Then suddenly you don't see the fly, and you didn't see it fly away. The lizard has in its mouth a tongue that is in effect a sticky harpoon. A lizard with a seven inch body can shoot an insect 12 inches away; and the harpoon flashes out, snares the prey, and brings it in with a speed too fast for the human eye to see.

Some animals have transportation problems. Perhaps none have met this problem more effectively than the pelican. His baggage compartment makes him a grotesque-looking creature, definitely not the streamlined type. But for the heavy and long haul he's sturdily equipped. With children with gluttonous appetites, and fishing grounds often a long way from home, transportation is a must if the family is well fed.

When the pelican's pouch is distended with a big fish catch it can hold upwards of 25 pounds. The young do not eat live fish, but partially digested, regurgitated food which they eat out of the pouch as from a bowl.

We should never think of spiders as timid creatures that scamper from every living thing that is not tangled in web. Some spiders are aggressive hunters, even hunting and catching fish and eating them. After seizing a small fish, these spiders suck the juice out of it by inserting fangs and crushing the victim with its powerful mandibles. Some can dive in water and stay under for more than twenty minutes.

Some birds in pursuit of prey reach a speed approaching the supersonic range. Humming birds can attain a speed of 600 miles per hour. A hawk can hit 200.

For mileage, birds put our best machines in the toy class. If we get a hundred thousand out of an automobile we consider it something special. The chimney swift, which makes annual pilgrimages to South America, will, in a lifetime of nine years, it is estimated, travel 1,350,000 miles. They can fly from morning to night without lighting, taking food and water on the wing.

Some fish can climb trees, which means, of course, that they must breathe air. The tree-climbing mudskipper "breathes" more efficiently through its tail fin than by means of its gills. It has been known to survive for a day and half with only its tail submerged.

Whatever an animal needs to see to thrive, it sees. The four-eyed anabelep, a fish found in Southern Mexico, feeds primarily on floating material encountered in the dual realms of air and water. For this specialized food gathering it has eyes that have accurate vision for water and another set for seeing in air. It swims almost continuously at the surface with its air eyes above the water and its water eyes directed downward.

The hippopotamus has his seeing equipment arranged in the most convenient place possible to suit his habits. Just the head of this huge animal would make quite a target if he had to lift it out of the water to see. But he can take it easy and comfortable lying in muddy water almost completely hidden out of sight of his enemies and still look about him. His eyes are, to all practical effects, periscopes. They are located on the very top of his head.

Other creatures are able to adopt one set of eyes for both air and water. The kingfisher may spot a fish from high above the water, then plunge underwater and with good vision pursue and overhaul its prey. A peculiarly shaped bulbous lens permits the quick-change.

The bird that could not make music surely would be an unhappy bird. Even those without voices will not be denied. The jacksnipe is without a voice. But it makes beautiful music nevertheless—by vibrating its tail and wing quills.

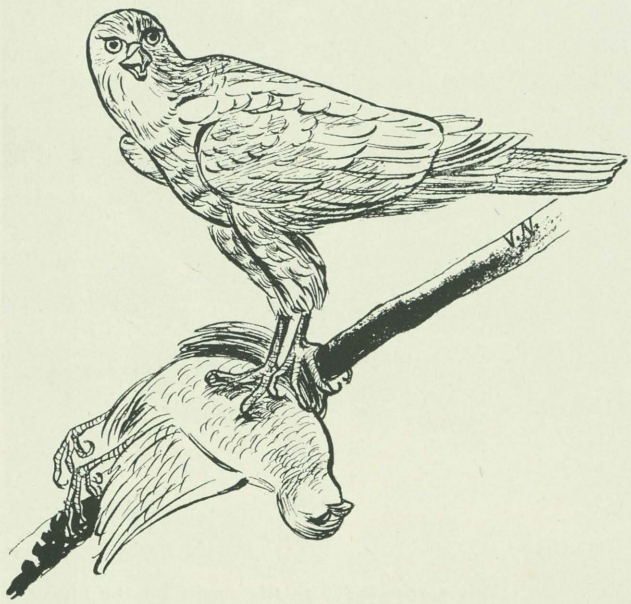
The camel is the traditional animal that can endure the long thirst. But other animals can make the camel look like a frequent drinker in comparison. For about two weeks between drinks is its limit. American frontiersmen have reported that the antelope can go months without water. And it has been claimed that the giraffe can go 40 or 50 days. Some porcupines rarely descend to the ground for a drink; they depend upon the dew and juices to sustain them. And some lizards of the deserts never drink water. Their rough hygroscopic skin absorbs and retains sufficient moisture for them to live their lives on the parched

desert sand without ever drinking water.

Laziness in animals often stimulates chicanery for bumming a living. The shark-sucker, or remora, has an adhesive organ by which it attaches the top of its head to the underside of another larger fish and hitchhikes a ride to a free meal. When the host fish attacks its prey, this bum drops off and joins in the feast.

The fringe-footed sand lizard, uma, of the Southwestern desert, has in a sense, added another dimension to the animal world. It is a swimmer, though water is about the rarest thing in the world to it. It "swims" in sand. While running at full speed the lizard dives into the sand, with its front legs pressed against its flanks, and by lateral, undulatory movements of the body and hind legs, and rapid vibrations of the tail sinks itself into the sand. Nature has uniquely fashioned it for sand diving. Its body and tail are flattened, giving it a thin appearance when viewed from the side. The head is wedge-shaped, perfectly designed for splitting soft sand at high speeds.

The fashioning hand of nature has been lavish with miraculous gifts to suit every need of the animal world. ●



How Not To Bag Your Buck

By GEORGE X. SAND

"Stay here and keep your eyes open and you'll no doubt see a deer," says Dick Rowe of Silver Springs, Florida, to hunting companion Ricou Browning. "I'll take my stand over yonder."

LAST SEASON, when well-known underwater performer Ricou Browning of Silver Springs, Florida, went deer hunting he made a grave mistake. His mistake was one that is often made by other sportsmen, particularly those 40 years of age and over who insist upon playing poker in camp until the wee small hours . . .

Browning, who has been seen by millions of theatergoers as the frightening, fish-like monster of the depths in Hollywood's "Creature of the Black Lagoon" series of movies, had gone hunting with a companion on land adjacent to the 385,000 acre Ocala National Forest. Known affectionately to Florida hunters as the "Scrub", the heavily deer populated Forest had already yielded over 300 animals to eager sportsmen during the first five days of the season.

"Ho—hum! This getting up with the sun is for the birds."

. . . and so he succumbs and becomes a member of the world-wide order of TGWWHFIFLETDTSAH (The Guys Who Would Have Found It Far Less Expensive To Do Their Sleeping At Home).

"Hello, what's that thing lying alongside the trail?"

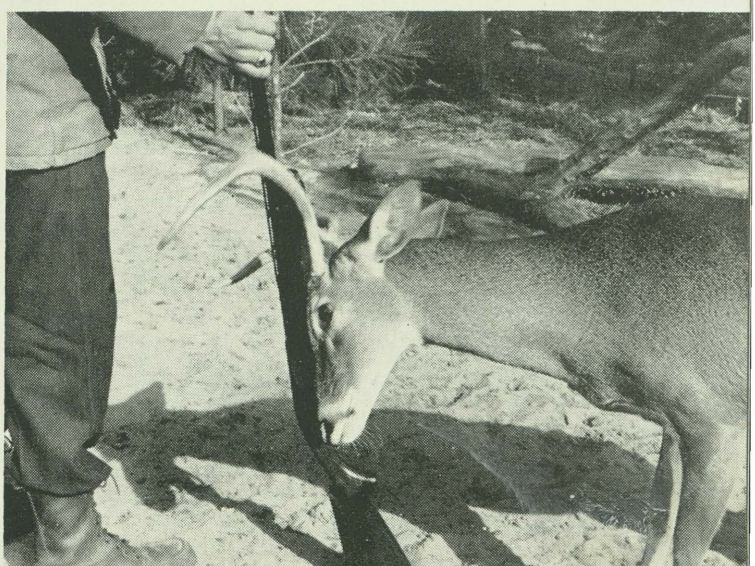
"It doesn't move . . . maybe it's dead."

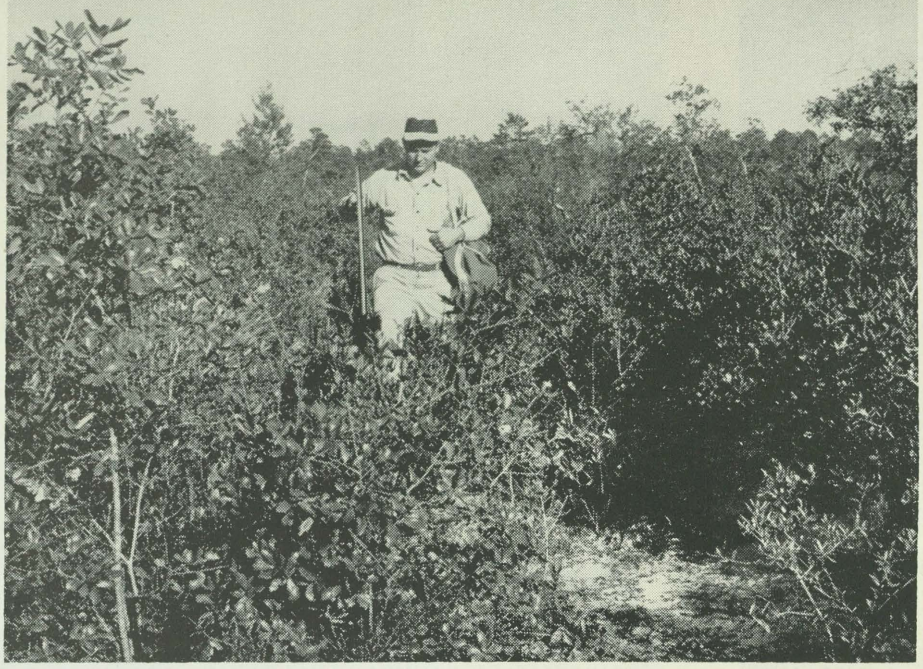
"Oh what an opportunity to get even with this guy for that shot in the fanny one of his friends gave me last fall!"

"I'd better dust out of here, however. You always come out on the short end when you mess around with these characters."

"Dang it! I should have kept the best stand for myself. Look at the size of those tracks—it was probably a 12-point buck!"

Lest readers should feel envious, photographer Sand is quick to confess that he posed "hunter" Browning and the obliging white-tail buck at Tommy Bartlett's Deer Ranch, Silver Springs, Florida. For further proof he offers the picture below of the house-broken 6-pointer rubbing his antlers nonchalantly against hunter's gun!





Biologist Dick Harlow paces off distance between sample plots in a four year old pulpwood cut sand pine-scrub oak habitat. A particular type may require as many as 200 plots before an adequate sample is obtained. —mn—

DEER RANGE STUDY

By DICK HARLOW

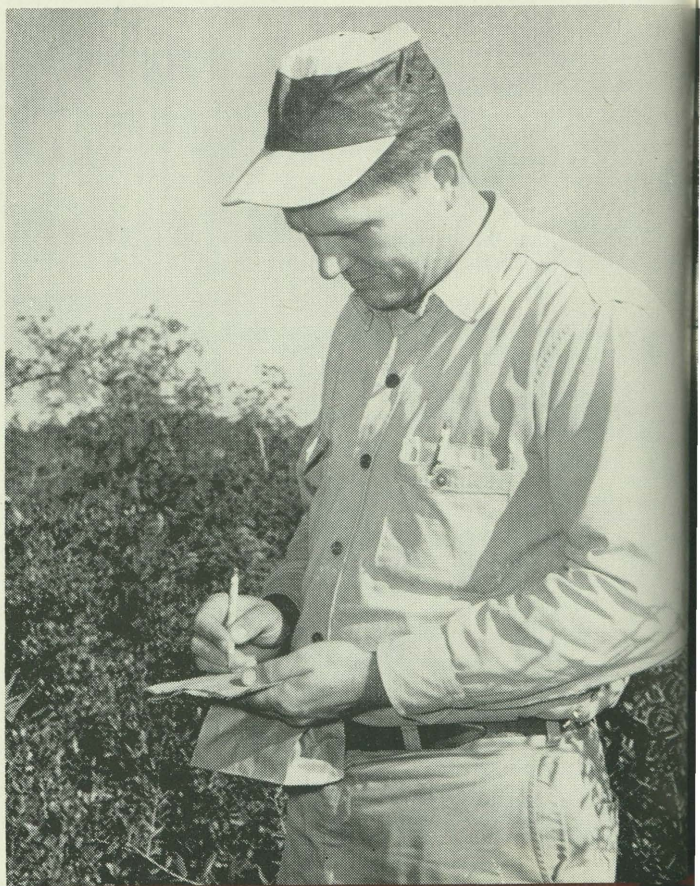
A CHAIN IS only as [illegible] weakest link, runs the familiar adage. That bit of homely truth has been applied to many things under many conditions but in no case is it more appropriate than in the management of Florida's deer herds.

To insure significant numbers of the ever popular whitetails for the state's hunters, food, water, cover, and protective regulation enforcement must receive attention for these form important links in the chain of deer herd management.

Food in sufficient quantity and quality is obviously of major importance when the population potential of any deer range is being considered. The variety of habitats in Florida as well as the various land use practices to which they are subjected necessitates a system of inventory which will yield a comparative measurement of the effects of these practices as accurately as possible. To know what effect these

All foliage lying within each quadrate is clipped and placed in a paper bag which is then weighed on a gram scale to obtain green cut in grams for the individual species. —mn—

Each forage plant species is placed in a separate paper bag with identification and location legend written on outside. —mn—



Left: The green plant material is weighed on a gram scale.

Above: Harlow records the gram weight of his sample and the utilization by deer or cattle. This information is used in determining the condition of the deer range. —mn—

activities have on vegetation is to know what practices are beneficial and which are detrimental to the deer population.

The successful cattleman knows within reason how many head of livestock a particular range will carry. He knows also how he can improve the range so that its carrying capacity is increased. It is through experimentation and practical experience that he gains this knowledge. The Game and Fresh Water Fish Commission is faced with a similar situation for only through an adequate knowledge of the potentialities of the state's deer ranges will the Commission be able to determine what must be done to maintain or to increase the state's deer herds to meet the ever increasing hunting pressure.

Determination of the values of various habitat types in the production of deer is obviously important to the Game Management Division in formulating management plans or considering acquisition of additional lands for the production of deer. Such information is obtained by the commission through the application of scientifically adequate inventory methods.

The browse study project is directed toward the determination of the deer carrying capacity of various habitat types (flatwoods, hammocks, swamps, and

(Continued on Next Page)

Left: Dick Harlow surveys a mature sand pine-scrub oak habitat where the dense overstory has shaded out the understory. Deer obtain little food from this type of habitat.

Above: Biologist Don Strode inspects deer browse in a 2-year old pulpwood cut in sand pine-scrub oak habitat. Deer food conditions are excellent in this type of habitat. Pulpwood cutting greatly improves deer range in sand pine-scrub oak country. —mn—

Deer range project leader Richard Harlow recording data in one of the fifteen generalized vegetational types occurring in Florida. This is a longleaf pine-turkey oak habitat where the pine has been cut out and the turkey oak (black jack oak) has become predominant. —mn—

(Continued from Preceding Page)

others) and the effect of such land use practices as the free ranging of livestock, controlled burning, wildfires, reforestation, pulpwood cutting, and timber stand improvement activities.

The browse survey is conducted during the late fall and winter months when annual herbaceous material has died back and the growth of most plant life is at its lowest point. The number of deer a particular range is capable of supporting is at its lowest ebb during this time of the year. As is readily apparent, the carrying capacity of any range is limited by the number of animals it will safely maintain during the critical low point of plant productivity and growth irregardless of its abundance at other seasons.

Longleaf pine-turkey oak habitat (black jack oak ridge) where the pine has not been cut out and the turkey or blackjack oak has died out. The longleaf pine-turkey oak habitat is one of the best types of deer range in the state. It covers large areas of Florida. —mn—

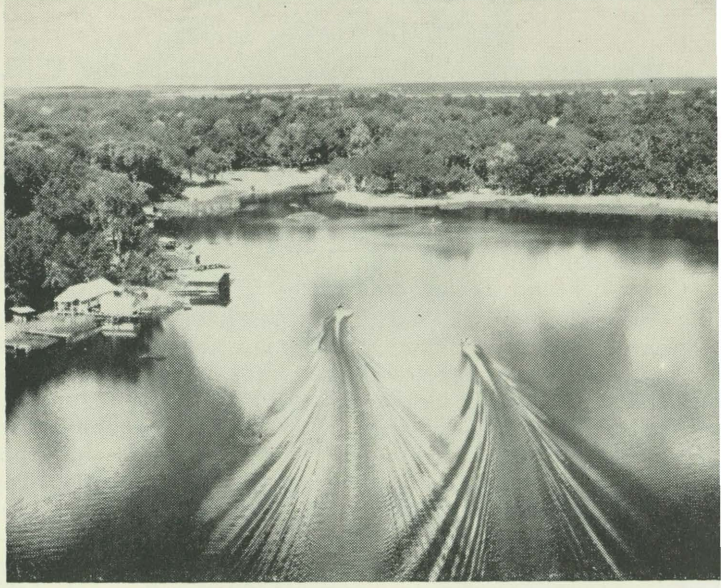
In Florida there are seven major vegetational types that may be considered of primary importance in influencing deer populations because of the extent of their occurrence and the variety of deer food plants found in them. These major types are; (1) rolling sandy pine lands, (2) scrub oak, (3) hammock, (4) swamp, (5) flatwoods, (6) prairie, (7) fresh water marsh land or everglades. These general types may be found intermixed in most management areas, however usually one or two types predominate. It is the purpose of the browse study project to inventory these types with reference to deer food production and with attention to the attendant land use practices.

Basically, project work consists of running a series of plots through the particular habitat type being inventoried. In each plot all green vegetation from ground level to chest height (approximately 3½ feet) is clipped and weighed on a gram scale. Each plant species removed from a plot is weighed separately. The number of plots necessary to make an adequate comparison of the amounts of the different plant species present in a type is dependent upon the variety of plants in a habitat and the extent of the land covered by the particular type. After a type has been censused, the figures are statistically analyzed to determine the validity of the sample. The individual samples are dried and reweighed to determine the original moisture content, an important consideration in evaluating the nutritional qualities of the browse. Representative samples are chemically analyzed to determine the nutritive qualities of various species at various times of the year.

The browse study is an important part of Florida's progressive wildlife management program. Just as "all that glitters is not gold" so all that is green is not deer food. ●

SIDE ROAD TO SALT SPRINGS

By ED LOUYS



Buzzing in to the Springs, a pair of outboarders from Lake George make for the picnic and camp grounds surrounding the Spa.

"IT'S THE KIND of place where a man can sit down with a cold plate of grits on a February morning and feel like a king at a banquet." That's how friend Buck Jeffcott of Ft. Myers, a roving sportsman, amateur photographer, and real estate broker, described Salt Spring "up yonder" in Marion County, Florida.

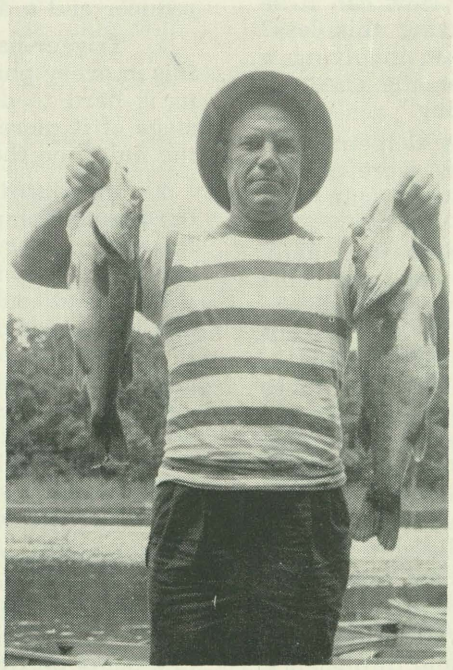
Situated almost midway between Gainesville and Daytona Beach, within the original boundaries of an old Spanish land grant known as the J. W. Hernandez grant, this spring is one of the few privately owned, unexploited natural attractions which beckon unobtrusively to the traveler of the side roads.

Salt Springs which may some day be the "Baden-Baden" of the Americas, is a natural spring which bubbles up from amidst the dense thickets of hardwood in the northeast corner of the Ocala National Forest and pours a mighty flow of "healing" mineral waters into nearby Lake George. An astounding 23,000,000 gallons flows daily to the lake via Salt Springs Run, one of the most picturesque waterways on the entire St. Johns River system.

The Run meanders leisurely between towering live oaks where otter and raccoon frolic along the banks down to the cabbage palm groves where it fans out into the marshy haunt of the wild duck and rail near the edge of the lake.

At every bend of the run, mother nature has created a special little treat for the keen observer of wildlife and woodland, and the speckled perch and bass fishing of this area hardly needs an introduction. It's good! But it is "crabbing", for the blue claws which abound by the thousands in Lake George, which is the veritable "way of life" in the Salt Springs country.

Numerous camp sites near the Springs are within rock throwing distance of some of Florida's best deer and turkey hunting. There is a fishing camp where you can rent boat and motor for a combined fishing-crabbing-sight-seeing expedition, a ramp if you care to trailer in your own outfit, or the outboarder can cruise right on in from beautiful Lake George.



On the fishing camp dock at Salt Springs, an angler proves that all the big ones do not get away. These bass were taken near mouth of Salt Springs Run in Lake George.

After the day's outing the visitor can bathe in rather luxurious fashion in the mineral springs, "cure" his lumbago or arthritis, or just take the kinks out of trail weary muscles. There is a swimming hole near the "Spa" with a perfect little beach, and it's mindful of the storybook theme to see a lad hold his nose and make a daring jump from the over hanging limb of an oak to the pool below.

Salt Springs offers no overnight accommodations but it does boast a restaurant with a reputation for serving gastronomical delights in the form of sea food—with the emphasis on blue crab. As a native gourmet might put it; "If'n you ain't 'et blue crab, you just ain't 'et."

In the surrounding forest which is part of the Ocala Wildlife Management Area, there are stands of timber to delight a woodsman's eye. But visitors are to avoid ranging far on the Jeep and game trails which bisect the region. Most of the trails lead to nowhere and a stranger lost in the Ocala Forest is lost indeed! Plant life is luxuriant, ranging from upland hickory and pine to cypress and gum near the water.

Folks with a yen for picnics, an outdoor camp site in the forest primeval, (Remember what Smokey the bear said!), with easy access to swimming, boating, fishing, hiking, hunting, crabbing, bird watching, or just lying quietly in the shade and communing with the grand old dame . . . would do well to turn off the highway to Salt Springs. It's a composite package of outdoor Florida . . . and no admission ticket is required. ●

THE WATERFOWL HEX

25% Down The Drain

By PHILIP BARSKE

DURING THE hunting season of 1955-56 the U. S. Fish and Wildlife Service made an intensive study to determine the total shooting kill of waterfowl. The season's toll amounted to 15,152,200 ducks and 906,635 geese for a total of 16,058,835 birds. These figures include both retrieved and non-retrieved birds. The non-retrieved portion amounted to 3,070,964 birds —21 per cent of the total kill, which was left in the marshes and sloughs.

For the past 15 years there has been an increasing emphasis on waterfowl management, by Federal, State and private agencies and the waterfowl flyway Councils. Cripple data has been gathered by many agencies, with the Federal Service's 1955-56 studies being the most recent; but over the years it appears that the national average for waterfowl loss is at least a disgraceful 25 per cent waste.

This annual loss is cutting drastically into our breeding stock and into our harvestable crop. It's poor business and poor sportsmanship to allow a fourth of the total annual waterfowl kill to go down a rathole because of carelessness.

The total figures for waterfowl cripple losses are not picked out of the air. Originally cripple losses were guesses, but the recent studies by state game departments and by the U. S. Fish and Wildlife Service provide reliable figures.

These figures from state and federal studies report only birds knocked down within sight of the observer and not retrieved! To give some figures, X-ray work by William Elder of Missouri and Jim Jordan of Illinois indicated the amount of lead thrown at waterfowl. In a study of 3,638 adult dabblers in Manitoba and Saskatchewan, Elder found by X-ray examination that one of four drake ducks was carrying body shot. Jordan, in Illinois, on a study of some 1,700 birds, found that adult ducks showed an incidence of 35 per cent of body shot—whereas, juvenile birds indicated a level of 14.5 per cent carrying one or more shot pellets! In other words, we have a staggering number of waterfowl that have been mighty close to death's door.

What is the cause of crippling loss? How can it be reduced? Who is interested in reducing this loss? Three questions, simple in nature but involving a mighty tough factor to work with, for the one real controlling element is the "human being."

Cripple loss stems from three basic elements, the human, the gun and the target. If there were perfect understanding and coordination between gun and man, the loss of cripples would be within reason. Where reason would lie is debatable, but it certainly shouldn't be 25 per cent. We always will have some crippling in all forms of shooting—it's inevitable—but as sportsmen and conservationists, we want to cut this loss to a minimum. Primary responsibility for this waterfowl wastage rests with the gunner. From there on we can speak only of basic issues—trigger-happy shooting, failure to use retrievers, inability to judge distances, inability to judge the effective range of a load, and poor marksmanship; predawn shooting hours, type of shooting, population available, period of season, not killing cripples immediately, type of cover, weather conditions, and an endless number of other reasons that contribute to the loss of birds.

It can be said that the number of waterfowl lost can be correlated with the attitude and proficiency of the hunter, his equipment, and the gunning conditions under which he shoots. Of these factors, the hunter's personal attitude governs the number of dead and crippled waterfowl he leaves behind him to such an extent that other factors become trivial.

In a Pennsylvania study, Randall found that novice hunters have a higher crippling loss than the average or veteran hunter owing partly to such causes as shooting at out-of-range birds and using inadequate shot loads. The cripple loss by the average and veteran hunter was reduced by more than 40% when retrievers were used.

Few of us go through a season without having cause for self-reproach over unrecovered crippled and dead birds. Even if we are indifferent to the humane aspect, we cannot ignore the fact that it is idiotic to allow at least one-fourth of the total annual waterfowl kill to be wasted! Maybe a rundown on some of the causes of crippling will strike a chord of self-reproach in us, and when the same situation arises this fall, possibly we will check ourselves in time to become a statistic reducer and a duck saver.

1. **Trigger-happy shooting**—Oh, boy! We've got this in every phase of the business. Just how it affects us is hard to describe but I confess I go through a stage of it more often than I care to admit. You are the only one that can change that; think it over.

2. **Inability to judge distance**—This undoubtedly is the greatest single cause of avoidable loss. Just why this occurs in gunner after gunner involves psychology and lack of shooting experience. The hunter who shoots at all out-of-range birds and occasionally bags one is not demonstrating skill but mere ignorance in the proper use of his fowling piece; the sky shooters cripple more ducks than all other hunters put together. A real sportsman waits until the bird is well within range so that if one is crippled a quick second or third shot will help erase the blunder of a partial hit. The extra shot carried in many duck guns should be reserved to rake a cripple the moment it is down.

3. **Poor marksmanship**—This hits us where it hurts! For ten months, old Betsy sits a'mouldering in the cabinet or in a damp gun case, and then on the legal hour of the opening day we proceed to do our practicing on live birds. We have just enough feel to get the birds in the outside pattern and do our damage. One federal official, who has observed gunners in the field for many years, said that many of the cripples

of the first few days are caused by "good" gunners, but "good" gunners who haven't shot since last season and consequently the first day out often becomes a "sighting-in" time that costs plenty of lost ducks.

4. Ability to judge properly the range of modern shells—Here is a matter that can become a real issue. Our modern shells are hard-hitting, but they are not radar-guided, nor does the man who purchases a box of long-range shells automatically acquire the skill that is needed for pointing the gun for that kind of shooting. A fundamental knowledge of the proper range and killing power of the shooting equipment still is basic. Even with the gun loaded with long-range shells, let's still remember that in long-range shooting the lead is the thing and that it's mighty important to have at least three to five pellets of number six chilled shot to kill cleanly. Of course, that's dependent upon the size of the duck and the location of the pellet penetration. Long-range shells have made real contributions to good sport when used intelligently. The numerous devices that make a garden spray of a scattergun must come back to reality and should not imply killing at foolish ranges. Shooting at birds that are out of range is the greatest single cause of avoidable loss. Why is this done? Probably because the hunter simply cannot judge distance. If that is the case, he should pace off and put a marker at thirty yards (consistent killing range), fifty yards (near maximum consistent killing range) and seventy yards (out of consistent killing range). Just as a man becomes intimately familiar with his automobile and the maximum speed it will endure, so must he recognize that his gun also operates within limits.

5. Failure to retrieve birds—The failure to retrieve birds is a wide-open case and ranges from the lack of a retrieving dog to just downright piggishness, in cases where birds are shot just for target practice or where a fellow is too lazy to exert himself to pick up a downed bird. Many shooters do not own or use dogs and must rely upon their own resources to retrieve. All is well and good if the bird is stone dead and water conditions are such that either boots or a boat can be used to pick up. The gunner shooting over deep or tidal water without boat or dog to aid in retrieving is a heavy contributor to the cripple loss. It takes will power to shove out after a downed bird and especially when the "limit" still is to be reached and there is danger of flaring any incoming birds.

Laws designed to protect the birds may add to the cripple loss. The present law does not allow shooting from a motor-propelled boat and this frequently is a hardship on a gunner who wants to pursue a wounded bird. To be able to have the necessary speed to chase a wounded bird is an important factor in bird recovery and also, in the initiative of the individual to go out. This regulation merits further consideration and it's up to us to develop the solution. The Atlantic Waterfowl Council at its May, 1956, meeting unanimously supported a resolution that power boats be allowed to retrieve cripples within a 200 yard radius of the shooting position or blind.

Failure to retrieve birds can't be passed over without a few words about the "eatin' ducks." How many of our smaller and "inferior" ducks are knocked down before the legal limit of "good" ducks is obtained? No one writing about ducks, sportsmanship, or laws can change many attitudes or individual levels of sportsmanship. Each of us must decide whether, in the pursuit of sport, we are justified in shooting ducks that will be wasted for the sake of getting a few.

6. Type of shooting—The various agencies interested in reducing cripple wastage have facts that show the effect of different types of shooting on cripple loss.

More widespread use of retrievers would greatly aid in reducing the appalling crippling loss of waterfowl, a national disgrace that sends an estimated 25% of the annual duck and goose harvest "down the drain." Above, Dick Macomber takes a Canada goose from his Labrador retriever, Sambo. Photo by George X. Sand.

Pass shooting: The highest degree of shooting ability is necessary for successful pass shooting and unfortunately, this type of shooting attracts many of the inexperienced gunners and thus results in the highest cripple loss.

Decoy shooting: This is the favorite type of shooting method and is best suited for the average gunner. If a gunner is conscientious, and is backed by a dog, the cripple loss can be held quite low; again dependent as is all other shooting, on weather and water conditions.

Jump shooting: This type of shooting is a favorite with many gunners and both by the nature of the sport and the situations usually encountered, cripple loss is relatively light.

Henry Davis of the Remington Arms prepared a yardstick for scoring and states that a good gunner will score 50 per cent on pass shooting or over tall timber, and will score 75 per cent when shooting over decoys or jump shooting.

7. Period of season—Most studies indicate that early season cripple loss is the most severe. We can attribute this peak loss to several factors; many of us know some secret ones of our own. As the season progresses, the vegetation becomes sparser, the birds are easier to find and also, the gunners who persist usually are dyed-in-the-wool shooters who know how

(Continued on Page 31)

Pruitt in action with one of the scrappy finsters of the North Fork.

NAPOLEON OF THE NORTH FORK

By BRETT BARTON

EXCITEMENT gripped the placid tropic reaches of Florida's picturesque St. Lucie River. The "periscope-like Thing" had been seen again. Two startled anglers had watched it streak away through the settling dusk to become lost in the shadowy depths of a jungle-bordered lagoon.

The Thing was uncanny. All that you ever saw of it was a black pipe, about the diameter of a broom handle, that projected up through the surface for a couple of feet. But somewhere under that pipe there had to be life and reasoning power. For whenever you tried to approach it in a boat the Thing either shot away, or quickly submerged from sight.

At first it had been suspected the submerged visitor may be some form of submarine. But there were those living in the nearby town of Stuart, where the river emptied into the sea here on Florida's lower east coast, who'd watched the German undersea boats try to gain entry to the St. Lucie during World War II. They knew that the water was too shallow this far up the river. Besides, the Thing was able to start and stop too quickly to be a craft controlled by human hands.

"Better tell Burt Pruitt about it," someone suggested nervously. "He'll chase it down . . . he knows this river as well as the fish."

Pruitt, a rugged little fishing guide with the body of a wrestler and the guileless blue eyes of an interested child, stood barefoot and shirtless as usual on the dock before his 240 acres wilderness retreat. He listened without comment as they described the Thing to him. After they'd gone he thoughtfully launched his battery-powered canoe, a small and silent craft which he enjoys using to prowl throughout the myriad waterways of his chosen jungle range and yet not disturb the fish and wildlife abounding there.

Within the week Burt had apprehended the Thing. It proved to be a 25-pound fish, a jack crevalle that some angler had attempted to land by means of a gaff hook, but which had managed to escape in the process. The big hook, four inches across, had gone completely through the fish's body at the backbone, so that the 3-foot handle remained upright as the sturdy victim swam through the water. The hapless jack had been living thus for some time, for the protruding barb of the hook had become grown over with moss and barnacles that further prevented its being dislodged.

Burt carefully removed the hook and set the fish free. Because the gaff hook proved to be still in good condition he kept it philosophically for future use. When newsmen and others came to congratulate him the stocky little outdoorsman with the twinkling blue eyes shrugged off the praise.

"It wasn't so hard," he told them in his typical droll, dead-pan manner. "The hook came out real easy."

Burt Pruitt shares his swampland hideout only with his wife—and those eager anglers whom he admits, almost grudgingly at times, to provide just enough income from guide fees to make him self-sufficient. In this unspoiled setting where air plants and wild orchids grow in profusion on all sides among palms and mangroves and other tropic trees that in turn border the labyrinth of bays and creeks and passes, such things as wealth, celebrities and social prestige have come to mean little to Burt and his wife. Instead, as the shirtless guide sagely puts it, the environment has brought their thoughts into focus upon "the things that really count in this life we all have to live."

While the words behind this sort of philosophy may sound trite, the result in the case of the Pruitts surely is not. Somewhere in the depths of their private swamp they have managed to lose much of their fear and worry over such things as the international situation, the dizzy advance of today's economy, the hypertension that is the invariable by-product of the modern workday world.

As a result, the one-time 107 pound auto service manager now weighs a healthy 160. He and his wife have rediscovered the feeling of physical exhilaration that comes only with repeated nights of deep, unin-

terrupted slumber. They know the pleasure of sharing misty, roseate sunrises—and enjoying fully the languid days that move unhurriedly toward equally inspiring sunsets and soft, star-bright nights.

Burt, refreshingly, takes no credit for any of this. "This business of finding happiness like ours is really a simple thing," he says. "Most anyone can do it. You don't have to be smart, or physically strong, or even have a lot of money. There are very few people today who can't tell you quite accurately how to go about making yourself happy. Trouble is, they refuse to apply the prescription to their own lives . . . the dopes."

And, after listening thus to the little guide as he sets off with you through the water-laced swamp aboard one of his fishing boats, it isn't long before his simple logic leaves you wondering if perhaps those in the outside world *aren't* a bunch of "dopes".

"In our case," he goes on, "we chose to return to the soil simply because it's a matter of record that those who live closest to the earth are the happiest. You can't be close to nature very long without establishing an improved sense of values.

"But you've got to make up your mind to take that first step, whether it's buying a piece of land, or changing an unsatisfactory job, or maybe just forcing a smile to your face to brighten an otherwise fleabag room you may have to get along in for awhile."

Burt picks a scarred fishing lure from his tackle box and holds it up for inspection. "This was given me by one of the nicest guys you could ever meet anywhere. A millionaire whom I used to fish. Know what happened to him? One day he blew his brains out. He was forever telling me how he wished he could quit it all and just stay down here and fish with me. Doesn't make sense, does it?

"Take the problem of drinking . . . it's no longer any secret that in the great majority of cases involving auto accidents, divorces, ruined business careers and what have you the cause is directly traceable to the bottle. Yet how many people today, particularly youngsters, reveal sufficient horse-sense and self-respect to say 'No!'—and say it good and loud?

"One out of every eighteen kids you see in a schoolyard or on a corner is a juvenile delinquent . . . one out of every three marriages doomed to go on the rocks . . . people who insist upon spending all they earn, meanwhile hoping blindly for the best . . . these are the dopes I speak of. They know there never yet has been a youngster who went wrong with a fishing rod in his hand and a father at his side. They know full well the absolute need for religion in their lives . . . a savings account at the corner bank . . . but they won't do anything about such important things."

Such profound observations seem completely out of place here in the watery swamp, particularly since they emanate from a barefooted fishing guide dressed only in a pair of faded dungarees. But then you recall how this "character" before you has built up a reputation for having guided some of America's most intelligent people over these Florida fishing waters, becoming the confidant of governors and tycoons, as well as gamblers, everyday citizens and those "who come to Florida with a $20 bill and one pair of pants, and never change either."

Celebrities mean nothing to Burt. He has made friends with three large and very ugly looking alligators ("Mike," "Willie" and "Lulu-belle") that come swimming from the far bank of the river at his roaring call. And it is a well known fact he will often show preference for the company of these big reptiles instead of that of some red-faced notable, or other "big snook".

Despite such independent behavior, however, the husky little guide's skillful services and refreshing surroundings are being daily sought after by civilization-bored men and women who find a welcome change in Burt's blunt logic and the simple comforts he affords them. The Pruitt camp, for example, has become a favorite hideout for desperate males of the smart Florida "Gold Coast" social set who welcome such opportunity to escape the continuous entertainment planned by their wives. Burt invites such refugees to "let their whiskers grow and recharge their batteries with man-talk and action".

When he takes you fishing Burt prefers to go bareheaded. However, unless he has fished you before, he will invariably start out by wearing either of two hats: a hard shipyard helmet (which indicates that he distrusts you completely), or a pith lid of the Frank Buck type.

"Over the years I've had to cut hooks from people's heads, necks, back and other tender places," he explains with a sigh. "There are those who should practice how to cast using a potato speared on the end of a pointed stick. It's too expensive to come to Florida just to learn how to cast a rod."

On one occasion he was guiding a well-known New Jersey official. Each time the man drew back his rod arm Burt would duck instinctively. "After awhile this chap turns to me with a friendly smile and says, 'Hell, Burt, you don't have to duck like that'."

"So I didn't—and got the next one right between the eyes!"

Pruitt was first shown his unspoiled river bank 25 years ago by a bootlegging airplane pilot who'd discovered it when he'd flown in from Bimini and cracked up there. Later, the pilot was shot and killed there by a vengeful Negro accomplice, but this didn't change Burt's desire to live beside the whispering, peaceful river.

"Nearby was an old Indian camp ground, later used as a ferry crossing by early White settlers as they followed the trail southward to Miami. These pioneers had found it necessary to keep one man stationed at

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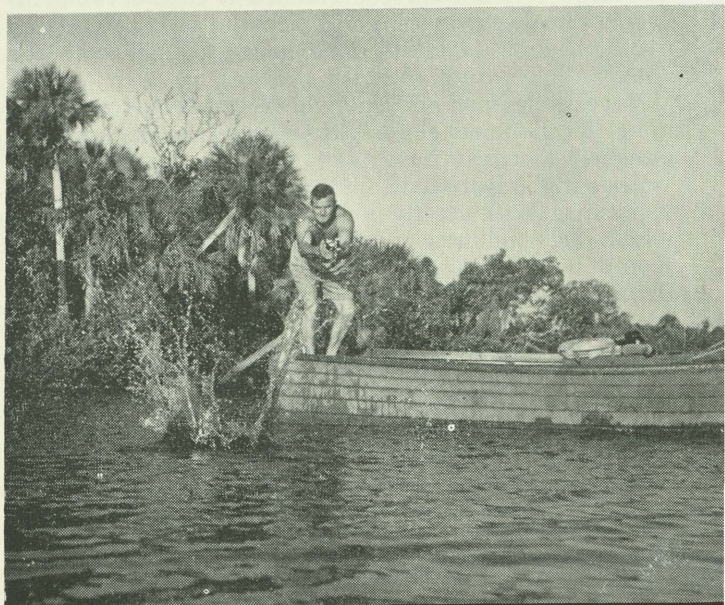
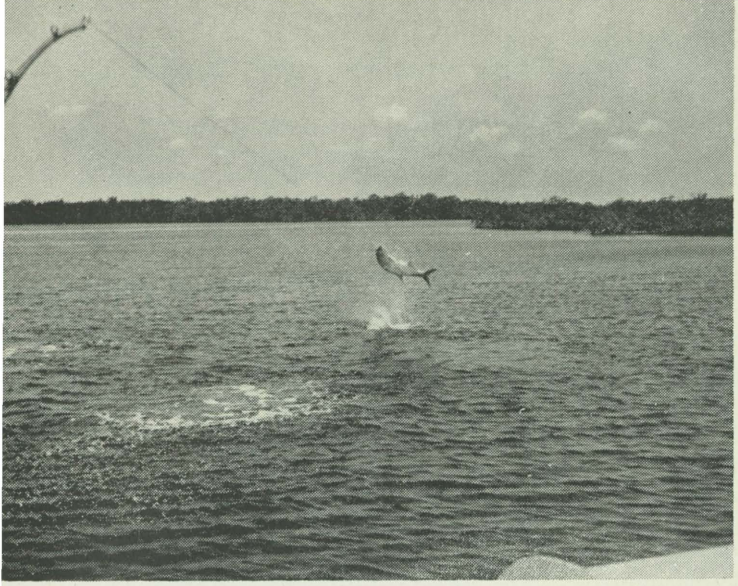
The St. Lucie River country boasts some excellent fishing, with thrills and action aplenty for the aspiring rod and reeler.





An abundance of both fresh water fish as well as salt water species are to be taken in the St. Lucie River country. Here a tarpon provides plenty of action for an angler near Pruitt's camp.

(Continued From Preceding Page)

the crossing to prevent the 'gators from eating up their cows and horses when the animals were in the water. They'd eat my dogs up today, if they got the chance.

"Just like most folks today who yearn for a piece of land of their own, I didn't have the money. But we took the first step, anyway. It wasn't until 17 years later that we found ourselves owners of the land and built our home in here. We raised our only son out here, too, eight miles from the nearest nieghbor. And, just like plenty of other youngsters who have been reared under similar circumstances in this county, he didn't grow up to be a juvenile delinquent! He works for the Government today."

Late one afternoon, shortly after they'd moved into their new home, Burt was exploring along a remote section of his beloved river when he came upon a sight which angered him. Commercial fishermen had slipped in quietly from the sea to stretch a mile-long net from one shore to the other. The big seine had stopped everything that swam against it. On the bank Burt found hundreds of pound of dead food fish, not only taken illegally but left heedlessly to rot.

Burt reported the matter. But the local authorities were understandably reluctant to act. The political situation in those early days was such that the big fish operators could wield considerable influence—even should they be caught in the act. And, because the large seines used represented a considerable investment, the owners had a reputation for getting tough, should an attempt be made to confiscate the nets.

Nevertheless, when Pruitt made it clear he would go after the violators alone, if need be, two officers were assigned to assist him.

That night Burt took his companions quietly downriver in a skiff. As they drew near the small bay in which he had reason to suspect the lawbreakers would be operating, he cut the motor, so that they drifted quietly with the current.

It was a dark night. But few stars showed. A restless wind was blowing in from the sea. Then they caught the subdued sound of voices coming across the water.

Burt Pruit suddenly switched on a searchlight. Caught in the brilliant beam, the startled netters started up their boat and bore down upon Burt and his companions, determined to ram them.

But Burt quickly extinguished the searchlight. Hurriedly backing off, he rammed the others, instead, as they shot past. They left several thousands of dollars worth of equipment behind. The incident led to stricter legislation which soon put an end to such poaching.

"Today, however, we've got a situation that's almost as bad," says the little naturalist dryly. "We've got tens of thousands of so-called 'sportsmen' in this country who purposely catch more than they can eat. They sell the extra fish to 'help make expenses'. Why, there are some chaps who come to Florida each winter just to support themselves that way, yet they are the loudest in blaming others for our decreasing fish population."

Sharing a boat with this little Napoleon of the river's north fork, where his camp is located, invariably becomes an adventure in listening. For he is blessed with a high-octane sense of humor behind his expressionless features. Selecting a lure from his scarred tackle box for use on your line he is apt to be overheard muttering: "If they don't hit this plug then they got lockjaw!" Or perhaps, after pointing out a choice point toward which you are to cast in the hope of landing a lunker bass or snook, "I've seen days when I'd almost be afraid to chunk a lure into that water!"

One morning recently the writer came upon Burt fuming at dockside. He'd inadvertently left a big sea trout exposed there the night before, after bringing the fish in after dark and forgetting it in his hurry to sit down to supper. Result: a couple of panthers had stolen from the surrounding woods to make a meal of the trout.

"I could hear 'em celebrating later, and I knew what they'd done, the sneaky so-and-sos," Burt complained sourly. "They were so tickled about putting one over on me that they screamed and cut up like silly women outside my window all night long."

Speaking of the opposite sex, Pruitt admits he never ceases to marvel at the obstinacy of the species. His pet "f'rinstance" involves a Miami attorney who once brought his wife along to the camp. At their insistence, Burt provided the fishing couple with one of his motorboats in which to venture alone into the surrounding maze of waterways. It was agreed, however, that should the two not be back by three o'clock that afternoon the guide would come looking for them.

When they failed to put in an appearance at the scheduled hour Burt cast off in search. After awhile he found them. Slipping close without being observed, he could hear the lawyer arguing futilely with his wife.

"She wanted to go to the right. He wanted to go to the left. Left was the way that would have led them back to the camp," says Burt.

Because the argument was growing rapidly hotter, the guide pushed his own boat into view and announced simply, "Follow me."

Safely back at the camp, watching the sunset from the porch of one of Pruitt's cabins that overlook the peaceful river, the woman was still determined. "Burt," she asked demurely, "what the devil is that sun doing going down in the east?"

Burt chuckles when he speaks of the man who observed sympathetically that Pruitt and his wife didn't venture out very often to go to the movies and fraternize with the local citizenry. "I told him we didn't find it necessary—that we had the world's strangest characters passing through our camp every day."

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Kickers For Anglers

The outboard motor cuts down time spent in reaching good fishing spots and gives the angler more time to keep his line and lure in productive fishing waters.

THE OUTBOARD has taken its place as an essential part of the fisherman's equipment . . . and for a number of very good reasons. The outboard has taken much of the "work" out of fishing. It cuts down time spent in reaching good fishing spots and gives the angler more time to keep his line and lure in productive fishing waters. It provides quick, convenient and economical transportation to hard-to-reach waterways and to good fishing locations that are inaccessible by land. Most important of all—it helps him to catch more fish.

As any experienced angler knows, only a relatively small part of any body of water provides really good fishing. It's a well-known fact that fish prefer to stay in areas that provide them with the two essentials of life—food and cover. With an outboard, the fisherman can locate these spots quicker and fish them thoroughly before moving on to another promising location.

An outboard is especially handy to have along when you're fishing a lake for the first time. With an outboard, you'll find the job of locating fish on a strange lake offers its own brand of fun. Cruise at your lowest possible speed as you scan the water and shoreline for likely looking spots. A gently sloping shoreline usually means shallower water where there are plenty of weeds—an excellent spot to try your favorite fishing lure. Watch for sunken logs, reefs, shoals, underwater holes, sand bars, lily pads and be sure to test them all. With an outboard, you can cover a large body of water quickly, so don't pass up any spots that look inviting.

When you find a likely-looking fishing location, anchor offshore within easy casting distance. Cast in toward the spot and retrieve slowly, allowing your lure to stop for short intervals. Most fish, especially the big lunkers, are reluctant to leave their cover for more than a few seconds. Permitting your lure to stop occasionally will make it easier for them to dart out of their hiding places and strike.

Start with a shallow-running lure first. Keep casting until you've covered the entire area. If you don't get a strike, switch to a deeper running lure and try again. Keep fishing deeper and deeper until you start getting strikes—or until you're convinced there are no fish in the immediate vicinity. If you don't have any luck, you can weigh anchor, crank up your outboard and move to another location.

When fishing fast-moving rivers or streams, your best bet is to place your lure near rocks and eddies, the tails of riffles and on the downstream side of fallen trees or brush, or at points where the stream enters a lake or another stream or river. Cutbanks, where the stream makes a sharp bend and the water is deepest, are also highly productive fishing spots, especially for bass. Simply cast upstream and let your lure float down to the fish.

Another fact to remember is that fish are usually found in shallower water in the spring and fall, but move to deeper water in midsummer and winter. During the hottest and coldest times of the year, therefore, it's best to do your fishing from early evening until shortly after dark and just before dawn when fish come in from the deep water to feed.

Although some "purists" put trolling in the same category as cane pole-and-worm fishing, this type of angling is rapidly gaining in popularity. In some localities and at certain times of the year, trolling is the only way to insure a good catch. And trolling is particularly effective when you're on a new body of water and have not yet located the best fishing areas. By keeping your lure in the water as you move slowly about the lake or stream, you can fish a wider area in a shorter space of time. You'll also find that fish move into deeper water during the "dog days" of mid-summer, and trolling is the best method to find them.

The same equipment you use for casting will serve adequately for trolling, although special trolling rods, lines and lures can be purchased at most sporting goods stores. A wobbly or darting spoon with a piece of pork rind attached to the hook is probably the best all-around trolling lure, especially for walleyes, pickerel, muskies and lake trout. Plugs of all kinds are good, but be sure your lure goes deep enough by attaching a heavy sinker to your line about 18 inches above the lure.

Live bait, such as a small minnow or frog hooked through the lips, is also good for trolling. When trolling with live bait, pull up the rod every few seconds. This will cause the bait to move through the water with a life-like darting motion.

Start trolling off shore where the

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TEACH 'EM EARLY

By BOB WICKMAN

HOW BEST TO TEACH Junior the art of shooting well and safely is the problem of every Dad who finds fun and deep satisfaction afield. When to start? How to go about it? The father who one day looks forward to having his own son as a hunting companion is bothered by these questions.

Actually, the process of teaching youngsters how to shoot is easy to accomplish and very inexpensive. It can be made an intriguing game that will pay rich dividends in companionship and understanding between the generations. The boy whose Dad is both teacher and friend rarely gets into trouble.

There is a school of thought that holds it wrong to give a young sprig a BB gun. This faction contends that possession of a BB gun makes a bad impression on the child's mind. He regards it as little more than a toy and this may lead him into disrespect for real firearms later on. The feeling is that it's best to wait until Junior can handle a sure-enough shooting iron, only then teach him the rudiments, finally turn him loose to hunt or target shoot.

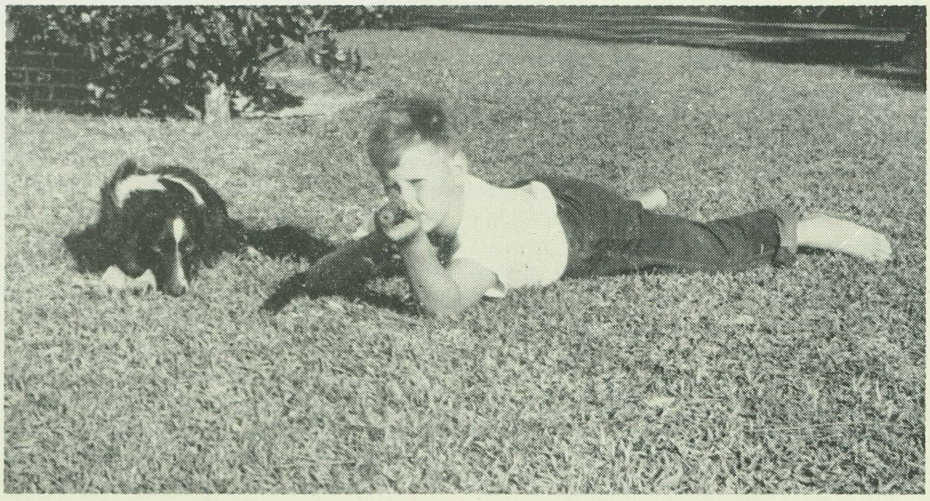
I cannot agree with this school of thought. This approach does not allow the youthful Nimrod sufficient time to acquire essential habits of safety. And all safety—whether in driving a car, running a boat, or shooting — is principally a matter of habit, *trained habit.* The lad introduced to guns too late cannot absorb enough instruction to make constant safety habits a matter of second nature, as they should be. No, Dad must start the training early in the boy's life. Not only will this pay off in safety and shooting skill, but also provide an extremely effective means of bringing father and son closer together. Guns and shooting are of such high interest to the young fellow that he will look forward eagerly to the brief training sessions and regard old Pop in an entirely different light.

A gradual, easy progression from the common single-shot airgun in rifle form, then to the BB hand-gun and finally to the .22 provides the best method of teaching small fry how to shoot. For the beginning phases of this simple program only an old-fashioned single-shot BB gun is required, plus plenty of pellets and a number of tin cans. You don't have to make a big production of it if you live in a large city by having to drive way out into the country. The back yard will do fine when a suitable back-stop is set up. This should be of fairly soft wood and large enough to catch the spread of Junior's first uncoordinated attempts.

Before the program is gotten underway, however, careful attention must be paid to the important matter of first presenting Junior his BB gun. *Remember, you don't want him to regard it as a toy.* It must *not* become part of his play regalia when he and his gang play Davy Crockett or Space Cadet. The gun should be given to the budding huntsman in such a manner that Small Stuff will be impressed with it. Dad should handle it exactly as he would a real firearm. He must explain carefully that a BB gun is capable of seriously injuring someone. Tell Junior it will provide him with much great sport, but only if correctly handled. At this time of presentation it is well to go into simple nomenclature with an explanation of how the piece works. The first session with the boy should be devoted only to this and the emphasis that the gun is not a toy.

If Dad feels that he must impart this "not-a-toy" impression with tongue in cheek, let him consider the many tragic cases of injury and blinding of bright young eyes by recklessly handled BB guns. Some states have gone so far as to prohibit their sale for this reason—a further dangerous encroachment of unrealistic gun legislation. Because some blockheads casually turn a BB gun over to youngsters without instruction and permit the kids to carry them around as toys, others are prohibited from using them. Worse, many tragic accidents occur that are utterly needless and unavoidable. Not to mention wanton slaughter of birds, property damage, and other abuses. Parents are as blameworthy as the kids in most instances.

So first we take pains to convince Junior that the little airgun is not a toy, but a tool in learning to shoot. Then we go into naming the basic parts common to all shoulder pieces such as muzzle, butt, stock, trigger, etc. The function of front and rear sights is gone into. After this, let the boy shoot a few rounds. Then—and this is most important— *the BB gun is put away.* Dad usually has a special closet, locker or gun rack where his hunting arms are kept.



The inexpensive single-shot BB gun makes a fine first gun for Junior. But only if care is taken to absolutely prevent its becoming a toy. Unsupervised use of the BB gun must be prohibited. Beauty of this little shooter is that it can be used anywhere if target sessions are properly supervised by Dad.

Store the BB gun there and keep it stored away until the next practice session. If Junior objects, it is only necessary to explain that Dad stores his guns away—why should Junior do differently?

Here, then, are the essentials of a proper start: The BB gun is not a toy and never to be regarded as such; and after use it is put away just like big hunters store their real guns.

Now comes the fun. Starting in the prone position because it offers the most steady rest, Junior starts sniping at large cans. He takes his position on a designated firing line —just like the Marines!—and only lets fly when the "range area" is clear. Cans offer a fine first target because they give off with a satisfying clink when well hit. Further, they demonstrate the dangers of glancing off shots. Dad and Junior can soon compete, counting the number of hits per 10 shots, then passing the gun to the other fellow. It won't be long until Dad will be hard put to keep up. Those bright young eyes and healthy nerves make a difference.

Gradually the can targets used become smaller. Family-size juice cans on down through the mediums and finally the small tin cans are put up on the back-stop. Just as soon as one size of can is consistently hit, a smaller one is put up. These shooting sessions are a lot of fun for all concerned and take up some of that slack time just before supper or in the early evening while the light is still good. That's the great advantage of starting with the airgun: any odd few moments can be utilized. No need to hunt for open country or a rifle range.

As the cans diminish in size, Junior will probably have a bit of trouble. Now it will be helpful to go into proper trigger squeeze. Dad should hold the boy's small fist in his big mitt and gently squeeze to illustrate the principle. At this point it is well to introduce the air pistol. I have found it easier and quicker to demonstrate squeezing, as opposed to yanking, the trigger with these little pistols. It adds an interesting change, too.

By this time, of course, our student has progressed from prone to standing position. Make sure he stands in a relaxed and comfortable manner. It should be explained that the hunter makes use of whatever position strikes him as most practical at the time he shoots. A rough knowledge of prone, standing, kneeling and sitting positions will put the boy ahead of the game should he later enter the excellent target program of the National Rifle Association for youngsters. As he should as soon as he is eligible.

What is the best age to start off with the airgun? In my opinion age 7 or 8 is not too soon. The training shooting sessions should be very much of a game. Correct mistakes gently and undertake the whole business as great fun. It *will* be fun for both student and teacher and the practice certainly won't hurt the old man, who may have muffed a clear shot at a buck last season.

These shooting sessions in the yard can be continued up until the lad is 9 or 10. Youngsters have a short interest span, so all sessions should be short and brisk, not long drawn out affairs. When Junior really gets proficient with his airgun, it is time to graduate him to a .22. The single-shot piece is probably the best and they are available quite reasonably. He will outgrow it rapidly anyway, so don't invest in a costly outfit at this time. Now it will be necessary to find a good place to shoot. This need be no problem since most towns have some sort of rifle club range that can be used. If not, you'll have to go out into the country and make arrangements with a friendly farmer. Or out to some woods close to town. Not much space is needed, only the firm knowledge that the practice shooting is controlled and of no possible hazard to others. A small hill will provide a good safe background to absorb the bullets.

First with cans of diminishing size and at longer and longer ranges, then to N.R.A. paper targets—the transition from airgun will be accomplished easily. All of the early knowledge imparted in the back yard is adapted to proper use of the .22 rifle. By this time the competition will be hot and targets should be scored and kept for reference. Junior will like a record of his improvement and the paper targets show his ability in black and white. Dad will find this .22 plinking and formal target shooting does much to keep his eye keen. Too many of us don't touch a gun between hunting seasons and then wonder why we miss or cripple game. Interesting target work can be continued all through late grade school and high school years, providing good fun and a chance for man-to-man talk so important to the young fellow.

At relatively minor cost this simple plan will mold Junior into a fine game and target shot. Having started early, he will gain a skill in shooting that will follow him through life. Progressing from airgun to the .22 rifle and finally to a real hunting arm, his safe handling of firearms will be a firmly planted

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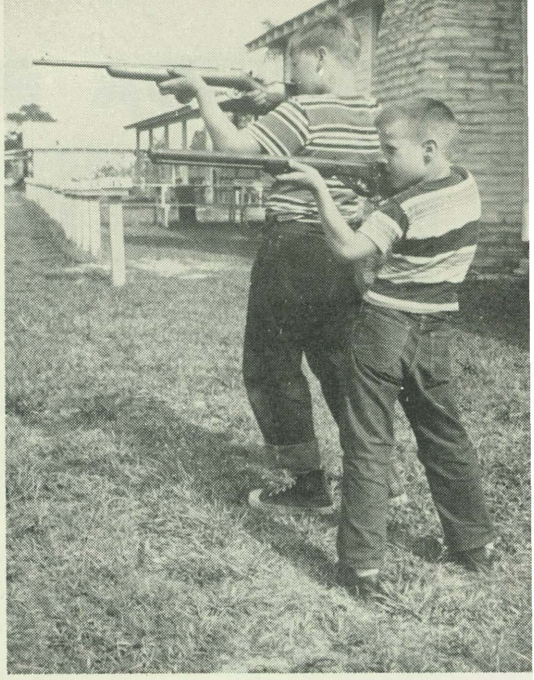
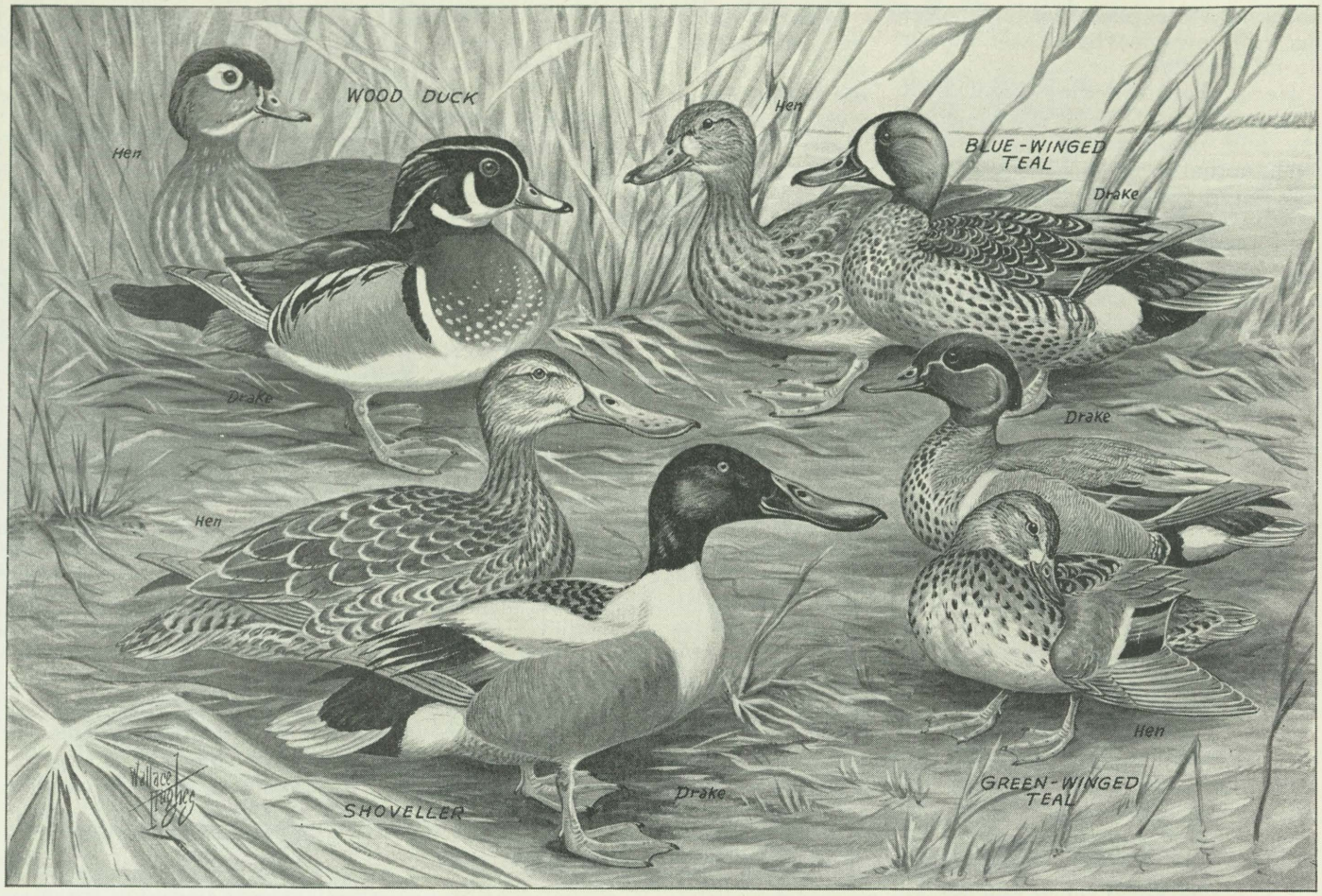


Here the little fellow is still working with the BB gun, the older lad with a single-shot .22 caliber rifle. For .22 practice, a suitable range must be located and utilized. Be certain an adequate backstop is used for though it is small, the .22 can be deadly in the hands of the careless.

Proper target shooting positions should be informally assumed. These positions are prone, sitting, kneeling and standing. The National Rifle Association, Washington, D. C. can provide you with booklets outlining correct procedures.

FLORIDA BIRDLIFE—Water Fowl—Part Three



Blue-winged Teal, *Anas discors.*

The blue-wing is essentially a warm weather bird, being among the earliest of the migrants to leave the breeding grounds and tarrying about the wintering areas long after most species have headed back northward in the spring.

The males are rather late in attaining their full winter garb, often the change from summer plumage is not completed until sometime during December. In general appearance, the male in winter plumage is a small duck of pinkish-cinnamon ground color with neck, breast, and sides marked with round, blackish spots. The head is slate gray with a conspicuous white crescent-shaped patch in front of the eye. The cobalt blue lesser and middle wing coverts comprise a conspicuous blue "shoulder" marking. The speculum is iridiscent green bordered in front with white, margined with a thin white border behind and on both edges with black.

The female gives the general impression of a small brownish duck with a white breast and large blue patch on the forewing.

Most of the bluewings heading southward pass through northwestern Florida during late August and September. They are not commonly encountered in that portion of the state during the late fall and winter hunting season, but are present in numbers in the lower half of the state at that time.

Although certainly not a regular nester in Florida, there are records of bluewings nesting within the state.

Green-winged Teal, *Anas carolinensis.*

The smallest of North American waterfowl, the colorful greenwing is exceeded in beauty only by the wood duck. The greenwing is very swift in flight. This fact, coupled with excellent table qualities, makes this teal a popular bird with waterfowlers. A flock of greenwings often engages in aerial maneuvers strikingly similar to the "drill team" actions of sandpiper flocks, wheeling and turning in perfect unison as if on signal.

More hardy than the bluewing, this duck winters much farther north, especially in the western part of the country.

The small size is an aid in identifying the greenwing in the field. The male is a strikingly marked grayish duck with a crested reddish head and green head patch extending from the front of the eye to the back of the neck. There is a narrow white crescent or bar on the side of the body in front of the wing. The speculum is metallic green inwardly, glossy black outwardly. The female is a mottled-brown bird with white breast. The speculum is similar to that of the male.

For the most part, the greenwing is found about fresh water marshes and ponds. Although they are capable of diving, they ordinarily do so only occasionally to escape danger, dabbling for food on the surface as do the other "pond" ducks. This teal is a common winter resident in the northern portion of Florida and rather rare in the southern part of the state.

Shoveller, *Spatula clypeata.*

The spoonbill, as the shoveller is often called, is a widely distributed bird, the four known species inhabiting the four quarters of the globe.

The shoveller is essentially a fresh water duck and, although widely distributed in the United States is much more common in the central and western areas.

The male is a strikingly colorful duck despite the fact that the huge bill gives it a distinctly top-heavy and somewhat ungraceful appearance. The head is a dark, glossy green, the chest white, the breast reddish brown. The female is a mottled ruddy brownish bird distinguished from other species by the huge bill.

Spoonbills, like the blue-winged teal, are warm weather ducks, leaving the northern breeding grounds early in the fall and tarrying about the wintering grounds until spring is well advanced.

The species is known as a common winter visitor throughout the state.

Wood Duck, *Aix sponsa.*

The Beau Brummel of our waterfowl, the wood duck is peculiar to North America. It is known as a breeding species in every state and as a wintering bird especially in the more southerly portions of the country. The beautiful plumage of the male is iridescent with distinctive white lines on the sides and face. Even the female, with her crested head, white eye ring, and bright-hued wings is much more distinctive in appearance than the females of most other waterfowl.

The wood duck is the only "dabbler" that habitually nests in trees, using cavities well above the ground level as nesting sites. When the time comes for them to leave the nest, the downy young jump out and flutter to the ground, landing without injury as much as fifty or sixty feet below.

Fresh water areas, especially wooded creeks and swamps, are the usual haunts of this resplendently plumaged species. About 90 percent of the wood duck's food is of vegetable origin, with the seeds of various trees and shrubs comprising a seasonally prominent portion of the diet. Wood ducks often walk about on land seeking acorns, beechnuts, and chestnuts to which the birds seem particularly partial.

Except for the extreme southern portions of the state, the wood duck is widely distributed and locally common throughout Florida. ●

SILENT BONES SPEAK VOLUMES

WHEN A MAN "finishes off" an illegally taken duck, and leans back in his chair with the complacency of one who feels that he has committed the perfect crime just because he has eaten the evidence, he is often due for a rude awakening.

Like the skeleton in the closet, the skeleton on the dinner plate can come back and haunt, because those silent bones speak volumes to the man who knows how to listen to them.

Not only do the bones say in substance that they are all that is left of what once was a pintail—or baldpate, or green-winged teal, or shoveler—but they also say whether they were once part of a drake or hen.

Sometimes they are forced to admit they are not what they were supposed to be, as was the case in Colorado when some nimrods who presumably had a "poached" grouse in the pot actually were devouring turkey buzzard, a study of the bones proved.

Fish and Wildlife Service biologists for many years have maintained facilities in the National Museum of Washington, D. C., to permit the accurate identification of bones or plumage of wild birds. These facilities have been invaluable in the apprehension of persons guilty of killing protected species of birds.

Not long ago a restaurant man in Texas was serving wild duck to selected customers. A few bones concealed in a napkin of one of the customers plus some laboratory work resulted in evidence which brought a conviction.

In another case a man had cut a fowl into three-inch pieces ready for the pot. He told investigators that it was a domestic goose and denied any knowledge of the whistling swan feathers which were found on his premises. A laboratory test of the bones of a piece or two taken from the pot proved that the bird was a whistling swan which is one of the protected species. Conviction followed.

In the grouse-turkey buzzard incident in Colorado there was no legal action for the buzzard is not a federally protected bird—and besides, eating the turkey buzzard was considered punishment enough. ●

THE WATERFOWL HEX

(Continued From Page 23)

to point and swing a gun.

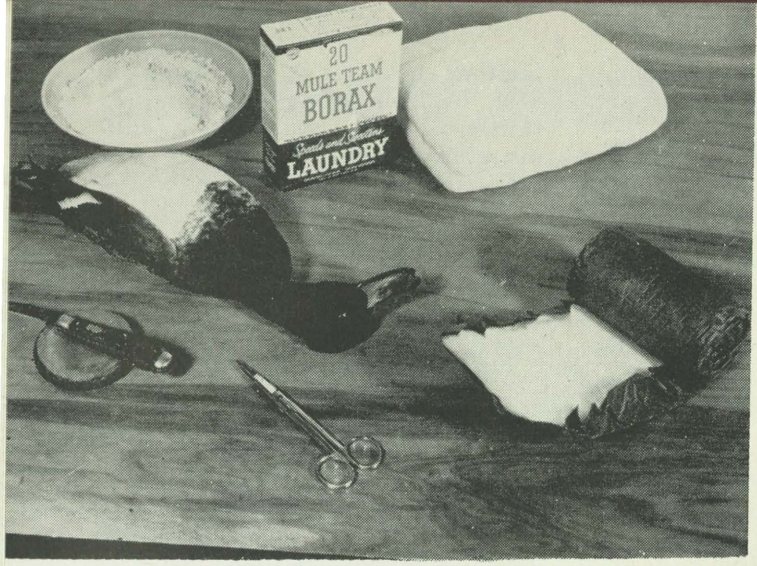
In many aspects of the whole waterfowl problem, there are comparatively few things that we can do as individuals to help waterfowl.

Nevertheless, as far as cripple and dead bird losses are concerned, one of the best ways in which we can help to reduce this tragic loss is to readjust our sights and our standards of sportsmanship.

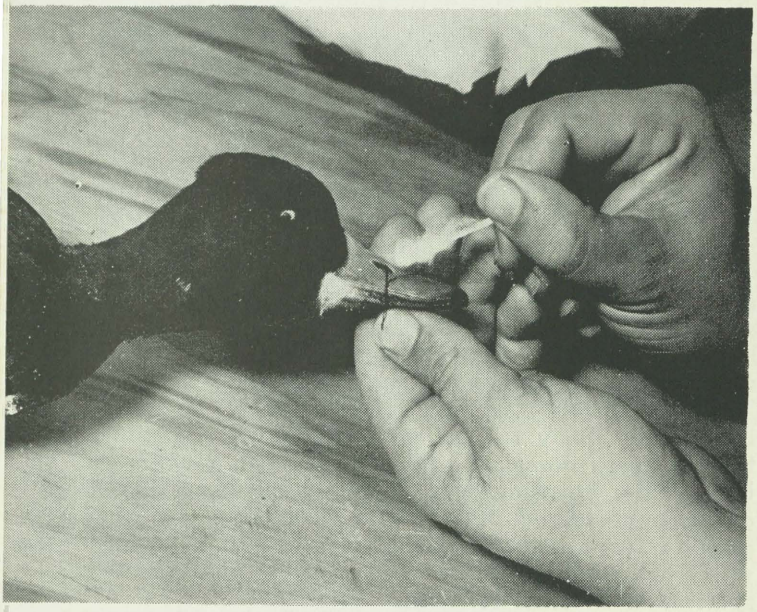
As individual gunners, our greatest responsibility and obligation is to ourselves—to make ourselves believe and feel like real sportsmen. It's a feeling that we all know and one that most of us have experienced at times. In discussing ideas and philosophies, I often think of the article written by the late H. P. Sheldon in *Country Life* (1940), for it illustrates the point: "I feel that I have an extra moral privilege to speak frankly on this subject, for in the past, I, too, have fired long-range cartridges in a long-range gun at a long-range duck who had nothing to lose but his life or his splendid gift of flight. He had, perhaps, burst his shell beyond the Arctic Circle on a night when the Northern Lights were sweeping long fingers of cold mysterious fire across the firmament. The Great Slave Lake, the Touissant Marsh where the slow stream of that name empties into Erie; Currituck Sound; and canebrakes, bayous and piney woods of the Deep South, and a winter on a shallow coastal lake in Louisiana. Then northwaard again to the Circle with a mate, and southward again, until one morning on Mattamuskeet a far flung pellet of number four shot smashed the delicate articulation of his right wing and brought him down to skulk helplessly amid the cattails until a mink found him finally. We're not cruel but we are damnably thoughtless." ●

SAVE YOUR TROPHY BIRD

By MORRIS SHAW

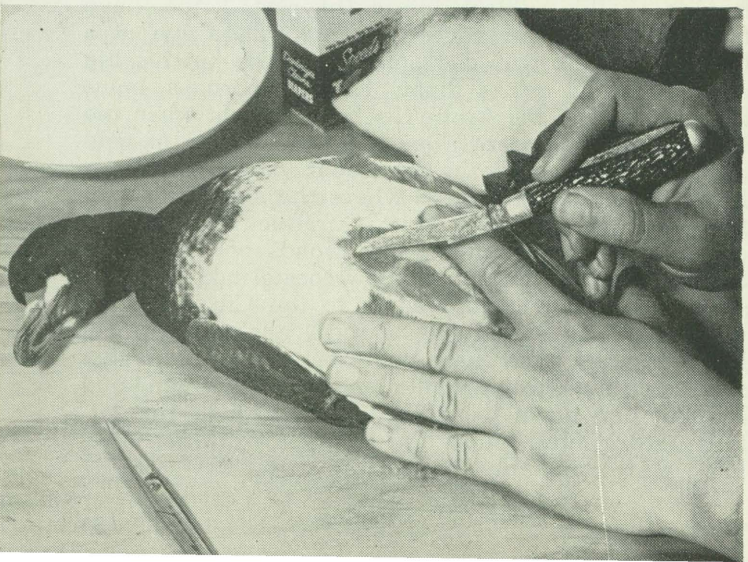


Preserving a bird skin for future mounting requires very little in the way of tools and materials. A sharp pocket knife, a pair of scissors, a quantity of corn meal, borax, and cotton complete the list



Above: Before beginning the skinning operation, stuff a piece of absorbent cotton into the mouth and throat of the bird and tie the bill closed. Stuff tufts of cotton into the nostrils. This preliminary work will prevent body fluids, which may drain through the mouth and nostrils during skinning, from soiling the plumage.

Below: After separating the feathers along the mid-line between the vent and the rear edge of the breast bone, make an incision through the skin from this lower edge of the breast bone to, but not through, the vent.



SURE IT HAS HAPPENED to you, it happens to every bird hunter sometime or other along the line. Maybe it goes like this; you're out in the pheasant country on a long planned hunting trip. A fine cock cackles up from the cover at your feet and with a well-timed shot you collapse the old boy in mid-air. Once in hand, you admire the bird's wondrous plumage of brilliant metallic colors blending with the softer pastel shades, a fair match for the blaze of autumn-hued coverts you've tramped that beautiful fall day. If only you could preserve a memento of that moment. The bird, mounted in all his life-like splendor, would fill most admirably that empty space on the mantel or on the shelf in the den, serving as an attractive reminder of a pleasant and successful day afield.

Or perhaps you are sitting in a duck blind, admiring a particularly prime plumaged drake mallard, canvasback, or bluebill. You can picture in your mind how a well-mounted specimen would look in that special made-to-order niche in your home. But then there isn't a taxidermist in your particular neck of the woods, or maybe the expense of a mounting job is a little more than the budget can handle right at the time, or perhaps you're way out yonder, a long way from a taxidemist's shop, a freezer, or even an ordinary ice box.

As a result you resign the bird to the fate of his less splendidly plumaged fellows in the game bag. Actually, with nothing more than the tools and materials that normally would be at hand, or at worst with a modest investment which may be counted in pennies, you can preserve your specimen until such time as you see fit to have a taxidermist convert the treated skin into a beautiful and memory evoking trophy of a successful hunt.

The list of tools is simplicity itself, a sharp pocket knife being all that is actually required, although a pair of small scissors will come in handy for some of the operations involved. For materials, a quantity of corn meal, a bit of borax, and a roll of cotton (absorbent and/or a cotton bat).

If necessity dictates, this meager list of materials may be reduced even further. At various times I have preserved for later mounting, using the basic method herein described, a Harlequin duck taken from a rocky, isolated beach in the Aleutian Islands, a mountain quail bagged near timberline in the rugged Salmon-Trinity Alps of northern California, a Chachalaca from the formidable chaparral thickets of extreme southern Texas, and a clapper rail from the cordgrass marshes of an isolated section of northwest Florida's Gulf Coast. These I mention particularly because all the tools and equipment available at these various times consisted of a pocket knife.

The actual skinning operation was the same although in the case of the Harlequin duck the stuffing was formed by shredding a pair of worn out wool socks, the mountain quail with the shredded dry bark lining of a wood rat's nest, the Chachalaca with part of the stuffing of an old mattress found in an abandoned shack, and the rail with some oven dried Spanish moss. These instances are cited merely to point out that, although not as satisfactory as tackling the job with the proper materials at hand, a bit of initiative on the part of the would be trophy collector may save a specimen which otherwise would be lost.

Let us assume you have the proper tools and materials at hand. Necessity will suggest substitutions should the occasion demand, once the simple procedure of preparing the skin is understood.

The freshly killed bird should be handled with care so the plumage does not become unduly ruffled or broken. All blood should be carefully removed from the feathers, using a bit of cotton or cloth moistened in cool water. Shot holes should be plugged as soon as possible using bits of absorbent cotton.

Before beginning the skinning operation, poke a piece of absorbent cotton into the mouth and throat of the bird and tie the bill closed. Stuff tufts of cotton into the nostrils. This preliminary work will prevent body fluids, which may drain through the mouth and nostrils during skinning, from soiling the plumage. If conditions allow it, the bird should be allowed to cool for several hours before skinning. A much more satisfactory skin will usually result from a specimen which has been thus allowed to "temper."

Next place the bird on a table or work bench and part the feathers along the mid-line between the vent and the rear edge of the breast bone. With knife or scissors now make an incision through the skin from this lower edge of the breast bone to, but not through, the vent. Care must be taken to cut through the skin only and not through the thin layer of muscle which lies over the abdominal cavity. After completing the cut, carefully separate the skin to the right and left of the incision, cutting with knife or scissors all tissues which do not easily separate from the skin. Keep the flesh that is exposed during the skinning process well coated with corn meal to prevent soiling the plumage. Any blood should be soaked up immediately with corn meal.

Carefully work the skin free over as much of the body as can be reached without undue strain on the relatively delicate skin.

Next grasp one leg and bend the "knee" joint, pushing it forward forcing the skin over the joint until it is exposed. Sever the leg at this joint then proceed with the other leg in the same manner.

After the legs have been severed, the skin along the back and lower part of the body is readily separated from the body. Work down along the back to the tail.

Taking special care not to cut the roots of the tail feathers, cut the fatty tail portion free of the body with knife or scissors.

Now, inverting the skin as you work down the body, free it from binding tissues until the wing bones are reached. Grasp the skin of the wing in one hand and the base of the wing bone with the other and carefully strip the skin down to the first joint. Clip the wing bone at the body. Remove all flesh from this part of the wing bone, dust it thoroughly with borax, wrap the bone with a bit of cotton to replace the flesh just removed and push it back into position. Do the same with the other wing.

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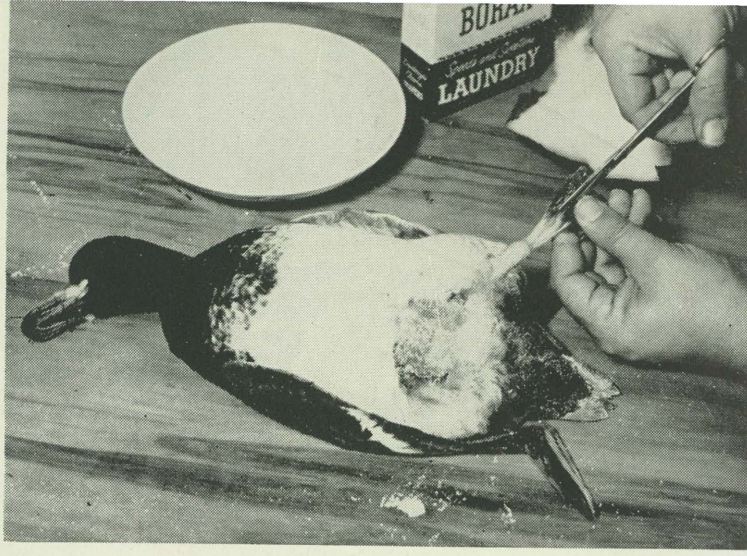
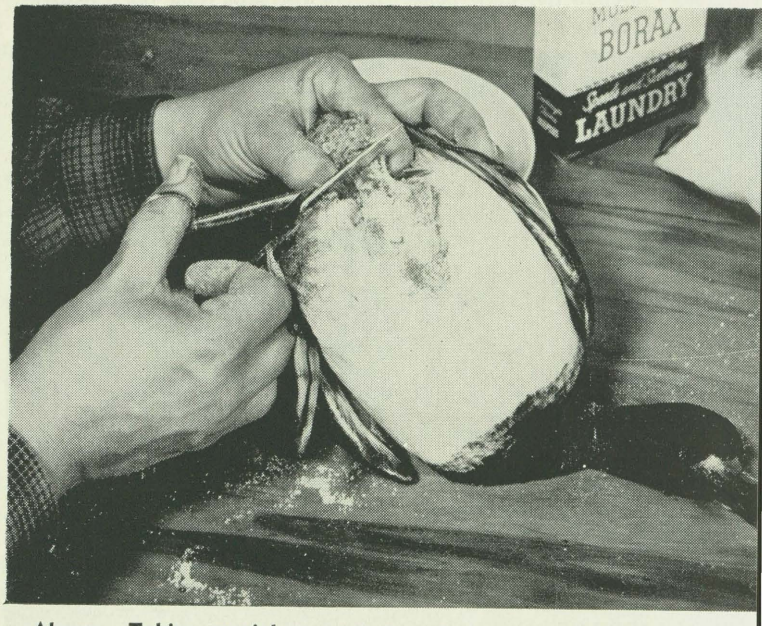
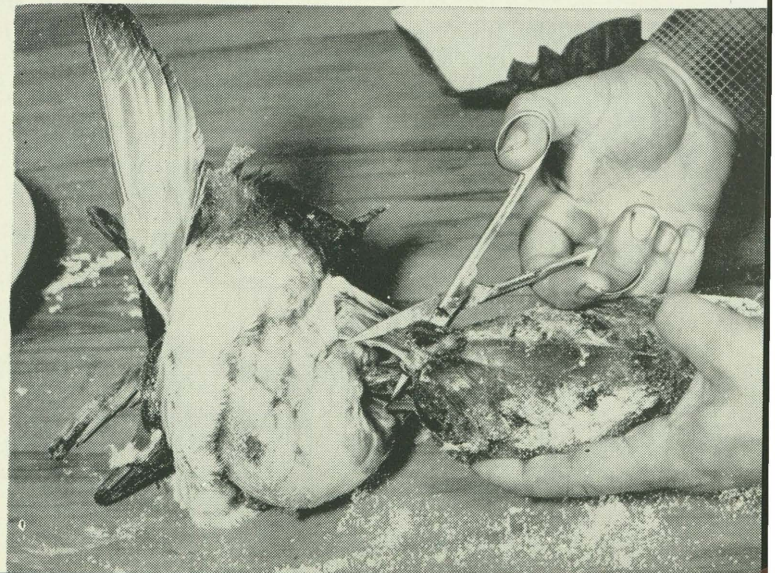


Above: After cutting the legs free from the body, remove the flesh from the leg bones, dust with borax, wrap with a layer of cotton to replace the flesh just removed and push the cotton-wrapped bone back to its former position.

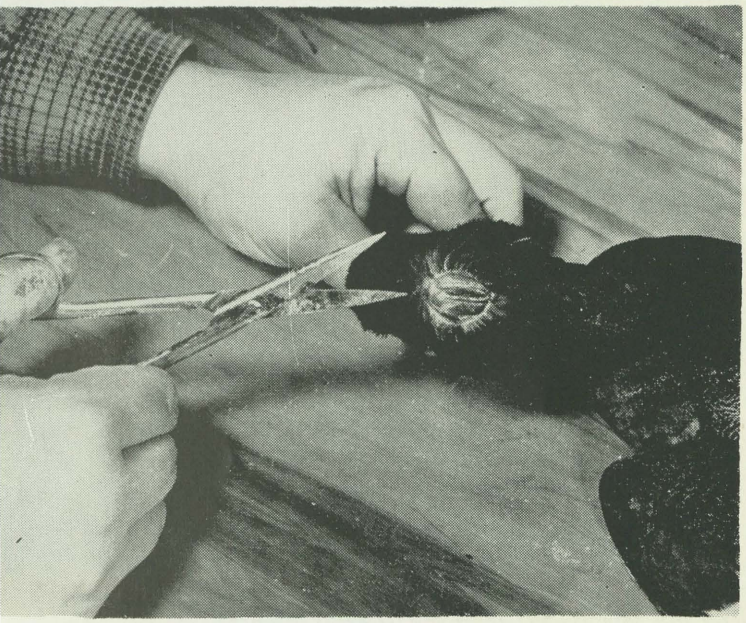


Above: Taking special care not to cut the roots of the tail feathers, cut the fatty tail portion free of the body with knife or scissors. Keep the flesh that is exposed during the skinning process well covered with corn meal to soak up body fluids.

Below: Free the skin from binding tissues until the wing bones are reached. Grasp the skin of the wing in one hand and the base of the wing bone with the other and carefully strip the skin down to the first joint. Clip the wing bone at the body.

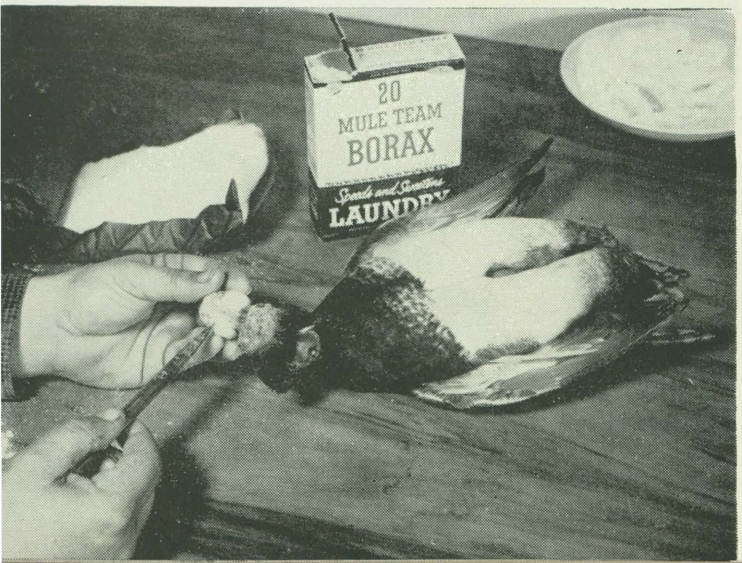


Above: With ducks and certain other birds, the head is too large to slip through the neck skin and it is necessary to make an additional incision at the back of the neck. Before doing this, cut through the neck bone, freeing the skin from the carcass.



Above: Turn the skin right side out, separate the feathers on the back of the head and make an incision. This cut should be as small as possible and still allow the head to be inverted through the opening.

Below: After cleaning the skull inside and out, dust with borax and fill the eye sockets with balls of cotton.



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Continue skinning by inverting the skin over the bird's head much as though you were removing a slip-over sweater or shirt. In the case of most birds, you may continue skinning in this manner over the skull to the base of the bill. With ducks and certain other birds, the head is too large to slip through the neck skin and it is necessary to make an additional incision at the back of the neck. Before doing this, cut through the neck bone, freeing the skin from the carcass. Turn the skin right side out, separate the feathers on the back of the head and make an incision. This cut should be as small as possible and still allow the head to be inverted through the opening.

In either case, when skinning the head, push the skin carefully over the base of the skull. The ears offer some difficulty to the inexperienced. The ears of birds are seen as tubes of fleshy material running into the lower front portion of the lobes of the skull. They should be pried free from the skull rather than being cut off. Use the scissors or the dull back edge of the knife tip to pry them out.

Proceed to the eyes. The thin membrane over the eyes must be cut but caution should be exercised to prevent cutting the eyelids. Continue skinning to the base of the bill. Do not cut the skin free from the skull.

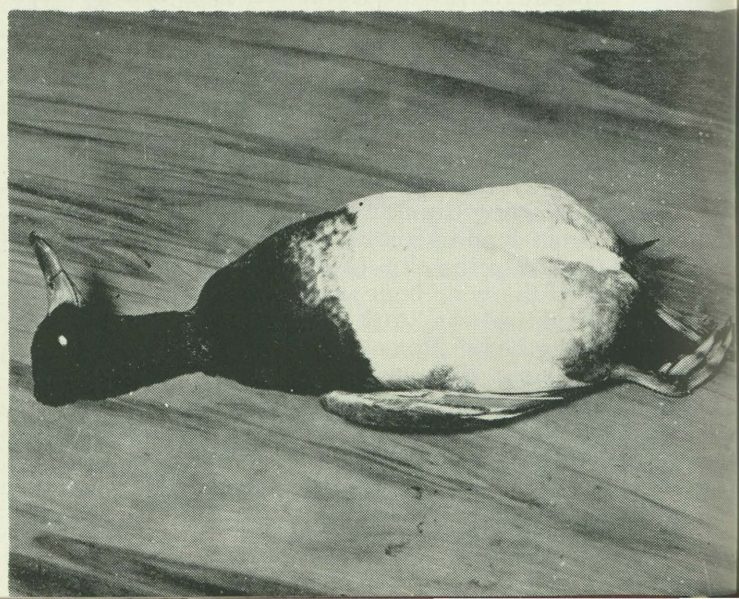
When the skinning has been completed as described, cut off the neck at the base of the skull, removing a small portion of the rear of the skull. The brains should be removed through the resulting opening. A tooth pick or match stick will serve this purpose. Carefully remove the eyes from their sockets, avoiding breaking them in the process as the fluid will badly soil the plumage. Trim all flesh from the skull, dust it thoroughly inside and out with powdered borax, and fill the eye sockets with small balls of cotton. Apply a generous amount of borax to the inside portion of the neck and head skin and turn right side out.

All fat and clinging flesh must be removed from the skin to prevent spoilage. A tablespoon will be useful as a tool for removing heavy layers of fat although light deposits may sometimes be removed merely by a thorough but careful rubbing with clean dry corn meal.

Remove the flesh from the leg bones, dust these bones with borax, wrap with a layer of cotton to the approximate size of the flesh just removed and push

(Continued on Page 37)

Form a neck and body of cotton wrapped around a wire or small stick and place inside the borax treated skin. Wrap with a thin layer of cotton netting, light burlap or other porous material to hold the wings in position until they dry.



HAWKS, OWLS AND WILDLIFE by Frank and John Craighead. Published by The Stackpole Company, Telegraph Press Building, Harrisburg, Pennsylvania. 443 pages, illustrated with photos, tables, maps. Price $7.50.

The killing and eating of one form of life by another form is known as predation. It is familiar to the farmer who glances up from his plowing to see a marsh hawk strike a mouse, to the hunter who glimpses a Cooper's hawk carrying off a wounded bobwhite, and to the sportsman whose tramping leads him to the fresh kill of a coyote, fox, horned owl, or golden eagle. Predation however, is by no means thoroughly understood. It is a normal biological phenomenon of very great antiquity and has long been a subject of study, particular attention being paid to the conspicuous, mobile raptors—the hawks and owls.

"The relationships between predators and prey have produced about as much heat and as little light as any topic in the wildlife management field," wrote internationally recognized wildlife authority Ira N. Gabrielson in his introduction to this excellent book.

This latest of the Wildlife Management Institute sponsored publications is the first truly detailed and comprehensive study of raptor predation; how such predation operates, the mechanics of its complex and interrelated functioning. It seeks to answer the difficult questions inherent in the problem of primary interest to hunters, game managers, agriculturists and others, that of hawks and owls versus game and "pest" species.

With a background of long standing interest coupled with technical ability, no pair of biologists is better qualified for the task of conducting the detailed study of raptor prey relationships than the Craighead brothers, Frank and John. The intensive all season study over a period of two years of two widely separated areas, one in Michigan, the other in Wyoming, revealed some extremely interesting facets of this complex and little understood phase of natural history.

Despite some impressions to the contrary, hawks and owls do not gang up to wipe out a few squirrels, rabbits, or bobwhites. Their average kill over any large area and for any substantial period is determined chiefly by relative densities of the prey species around. They will, of course, take some game species, but these actually are a fraction of the animals they kill and eat. Such victims may be animals that a hunter otherwise might have harvested. On the other hand, while taking this toll, they are reducing greatly the very numerous undesirable species, such as mice, rats, pocket gophers, and ground squirrels.

Hawks, Owls and Wildlife is a book that will prove of interest and value to anyone having an interest in wildlife. -mn-

THE COMMUNITY OF LIVING THINGS IN FIELD AND MEADOW, by Etta Schneider Ress. Published by Creative Educational Society, Inc., Mankato, Minn. 200 pages, 100 illustrations. Price $6.95.

"Field and Meadow" is one of a series of five volumes presenting in photographs and text the fascinating story of "the community of living things."

This book is a picture story of the plants and animals of the open spaces and how they live together in a community. Not all the species that live in all the fields are presented but most of the typical ones are shown in striking, lifelike photographs by America's greatest nature photographers.

Within the scope of this book, fields are understood to mean the areas that are non-forested and uncultivated, where weeds, grasses, and wildlife live in a natural state; also the open spaces in cultivated grain or vegetable fields, meadows where hay crops flourish, and pastures where cows or sheep graze.

The pictures and brief texts will help you explore these sunny places, discover some of their interesting inhabitants and see how they manage to withstand the continuous sunlight and often intense heat of a summer day, the drying winds, the long periods of winter cold.

The book's six chapters cover life in the field community, plants that live in the field, cold-blooded animals of the field, birds, mammals, and the field and meadow community. -mn-

THE COMMUNITY OF LIVING THINGS IN FOREST AND WOODLAND, by Stephen Collins. Published by Creative Educational Society, Inc. Mankato, Minn. 200 pages, 100 illustrations. Price $6.95.

Another in the five volume Community of Living Things series (the complete set sells for $34.75).

The forest is a community of trees with its whole natural economy organized around wood. It exists where there is at least a minimum of fifteen to twenty inches of rainfall per year. Deciduous forest (where leaves are shed) may require thirty or more inches of rainfall per year.

The forest softens the force of the wind and the raindrop, and moderates excessive heat, cold, dryness and wetness within it. Winds dashing across prairies and plains slow down as much as 60 percent and "walk" through the forests. Winds in the woods may be much slower than those in open areas. Slower winds do not evaporate moisture so rapidly as do strong winds. Thus, much of the natural moisture from rain and from leaves is retained. The tall trees stand silent guard over a world of plants and animals beneath them. Life for them is easier in the forest than on the open prairies, tundra or desert.

This book depicts in text and photos many kinds of forests and how they influence life. By forest is meant an unbroken tract of thick-growing trees and shrubs. A forest may have trees of all heights and ages, some open areas, and some waterways. Forest wildlife needs the shelter of the underbrush and foliage, but it also depends on the clearings and streams for food and water.

The exciting drama of life in forest and woodland is presented in a highly understandable manner. This book, as others in the series, is a concise, basic treatment of a subject having importance in the fields of conservation study, natural history, botany, zoology, and ecology. -mn- ●

FISHING

By CHUCK SCHILLING

THE RECENT survey of sports fishing by the U. S. Fish & Wildlife Service found 21,000,000 Americans spending nearly 400,000,000 days pursuing the art of angling. That's a lot of people, spending a lot of time, trying to catch some fish.

When you, further, consider that a fair percentage of these anglers dislike fish as a food and that a good percentage of the fish caught were released, it becomes obvious these people must have some primary purpose beyond dead fish on a stringer. After all, the 2 billion dollars a year they spend would buy a considerable amount of dead fish at market prices. Years of close association and observation of the angling clan have convinced me dead fish play only a small part in the over-all sports fishing picture.

There are many reasons why people take up angling as a hobby or spare time pursuit. Because of the ever present fishing contest, some anglers fish for prizes or to feed their ego. Some fishermen fish for meat in the pot as their primary goal. Some sports fishermen use angling as a safety valve for their competitive drive. It's my opinion, however, that all these groups together make up a very small percentage of sports fishermen as a whole.

Whether we "he men" like to admit it or not, we anglers make up the largest group of "nature lovers" in America. We excel in bird watching, wildlife photography, natural history, and nature study. We are an army of keen observers, who, for some strange reason, ply our skills as amateur naturalists covertly, as though it were somehow a little shameful.

Let us, in a flight of imagination, visualize a syndicate of business men who, upon reading the statistics of sports fishing economy, decide to make a fortune exploiting it. After spending several million dollars, they offer the sports fishing public a more practical, economical, and timesaving method of going fishing. Imagine a 10 acre, concrete pool with an average depth of 5 feet. Imagine walkways 5 feet over the surface and 50 feet apart, crossing this pool in 2 directions, dividing the water into 50 foot squares. The pool is surrounded by a 20 foot, concrete wall and is protected overhead by a high, wire screen.

The pool is stocked with millions of game fish of all sizes. Fishing is done with worms and minnows, using cane poles furnished by the management. Admission to the Fishing Pool is $1 per person, and fish caught are checked out at 50c a pound, with no limits to the catch and no catches returned to the water. Management, of course, supplies a constant influx of fish to the pool, and the feeding is so regulated the fish remain hungry and bite at anything offered.

Now wouldn't that be a big advantage? Think of all the savings this would offer. Think of all the trouble it would avoid—no more boats, motors, or trailers to buy and keep in condition—no more fishing tackle to bother with—no more skill to develop or knowledge to acquire. I'll bet such a fishing pool would make a fortune—in a pig's eye! Except for first time curiosity hounds, no one would go near the place—would you?

No—the truth of the matter is, (whether we're ready to admit it or not) we anglers use the catching of fish as an excuse to reaffirm our affinity with the natural world around us. Let's face it—we're all a part of that world. We human animals have evolved a complex society to support the conventions we have enacted. Most of our present day trends take us farther away from our natural environment and surround us with unnatural conditions of living.

But man is an animal—just as much a part of nature as the deer or bear. We have basic instincts and impulses that hunger for communion with the natural world from whence we came. We anglers have a ready excuse to yield to these longings while participating in our sport. This is what makes angling the foremost sport in America, and this same reason will make sports fishing even more popular as time and progress seal off more and more Americans in artificial surroundings.

Who are these 21 million American anglers? In the National Sports Fishing Survey just completed, I can find no breakdown on this subject, but I'll venture a guess that a very large majority of these anglers are city folk.

Do you know any farmers who are sports fishermen? I doubt it. Living and working on a farm are about as close to having a natural life as our society permits. The farmer is dealing with nature and natural laws as a matter of daily work. He's part of a natural phenomenon of growth and life and changing seasons that gives him a close identity with nature and provides a ready outlet for his own natural instincts. The farmer doesn't need to go fishing.

I'm personally acquainted with hundreds of sports fishermen from every part of America. I'd guess they are fairly representative of the 21 million American anglers. Not one of my angling friends is a farmer, unless he's a "gentleman farmer," fugitive from a metropolitan past. Take myself as an example: I'm a city boy who has, for better than half a lifetime, labored in the city marts to make a living.

In my younger years, I could "lift mine eyes to the hills" only fleetingly. I progressed from one line of work to another, always getting deeper and deeper into an unnatural, complex, and mechanical environment. I soon found a retreat in sports fishing that offered escape into the soothing influence of the natural world. Today, I'm still a part of big business and in a very competitive capacity. The years have taught me well, however. I now live "out in the woods," surrounded by a natural wildlife habitat. I'm an enthusiastic angler, who recognizes his sport as not only a skillful endeavor but a therapeutic

exercise as well.

We human animals differ from the lesser animals in many wonderful ways, not the least of which is our ability to exist under unnatural environmental circumstances. We fly thru the air in defiance of our physical ability. We cross the seas beneath the waves, and we labor day by day under physical and psychological conditions as foreign to our natural being as the automobile we drive. We have so subjugated our natural selves in unnatural conditioning that we continue to pilot these cars on the nation's highways at ever increasing speeds, knowing full well that last year 40,000 of us lost our lives so doing and over 100,000 of us were crippled and mangled just short of death.

Is it any wonder 21 million Americans take to angling in anxious relief from an existence that gets more complicated and artificial as time goes on? I think it's important we anglers recognize these by-products of catching fish. A greater development of these fringe benefits can be accomplished only after an understanding has been established.

I've learned to meet my need for a greater natural communion by developing a greater awareness. I never go fishing without adding a little to that ability. I think the angler, tuned thru personal awareness to a oneness with nature, is a most fortunate man. I have known, and I now know, men who developed this awareness to a soul satisfying reverence that not only enriched their own lives but rubbed off a little on those around them.

I don't underestimate the act of fishing in these considerations. In my opinion, angling gives purpose to the whole. Angling forms the hard core of practical endeavor around which the intangibles revolve, illusive as fireflies lighting the dark over a daisy field.

So—21 million Americans can't be wrong. Some fish for meat, some for prizes, and some for glory—but most fish for fun, plus an opportunity to satisfy a basic hunger that gropes for an alliance with the natural world from which we come.

Let's recognize the hunger and, while we fish, let's keep a small part of our consciences aware of the soothing influence the out-of-doors offers to us all. ●

KICKERS FOR ANGLERS

(Continued From Page 27)

water is 8 to 10 feet deep. Keep your motor idling at its lowest possible speed, being sure to keep moving fast enough to get the proper action from your lure or live bait. If you don't get any strikes, move out to deeper water—15 to 25 feet deep—and try again, using a deeper-running lure and adding more weight to the line. If two anglers are fishing from the same boat, they can each try different lures at different depths until a fish strikes.

A little extra care in maneuvering your boat while trolling is necessary. Go slow. Keep a sharp lookout forward to be sure you aren't getting too close to other boats, swimmers or obstructions in the water. And always make wide turns to avoid fouling your fishing line in the motor.

What type of boat and motor are best for fishing? There are as many answers to this question as there are fishermen. Actually, almost every type of outboard is used for fishing. Many cabin cruisers do double duty as pleasure craft and as fishing boats. In other areas, anglers prefer a small 6 or 8-foot dinghy or pram.

The final answer depends on where you plan to do most of your fishing and the type of fish you're after. A small dinghy or pram with up to 6-horsepower motor is usually the favorite of fishermen who do most of their angling in small, shallow lakes and sloughs. For the average-size body of water a 10 to 14-foot boat with a 5 to 15-horsepower motor is probably the most popular. For large lakes and for offshore fishing, you'll need a larger rig—a 16 to 20 or 22-foot or larger boat with motor to match.

Other important things to consider in making your selection of an outboard for fishing include: How many passengers and how much equipment will you take with you? Will you be able to moor your boat at your favorite spot, or will you store it in your yard between trips? If you must trail your boat regularly to and from the waterways, then portability should be an important feature of the outboard you buy.

With such a wide selection of boats and motors being used for fishing, it's always a good idea to talk to sportsmen who have fished the same lake, stream or coastal area where you plan to do your angling. Learning all you can about the various types of boats being used in your area will put you in a better position to select an outboard outfit that's tailored to your needs. ●

SAVE YOUR TROPHY BIRD

(Continued From Page 34)

the cotton-wrapped bone back to its former position. Slit the underside of the two outermost wing bones, clean out the flesh, and rub borax into the incisions. Rub borax well into the body skin and turn it right side out. Grasp by the bill and shake the skin to rearrange the feathers.

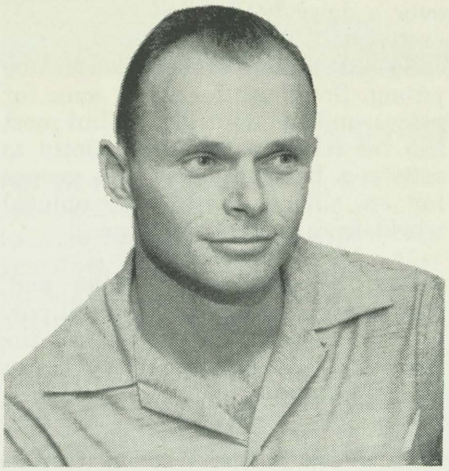
Secure a dry stick about the diameter of a pencil and somewhat shorter than the original neck and body length of the bird. A piece of wire of about the diameter used in a coat hanger will also serve. Form a neck and body of cotton, rather loosely wound, of about the same size as the natural one and work it into the skin. Do not sew the belly incision closed but be sure the edges do not double back which would prevent them from drying properly.

Wrapping the completed skin with a thin layer of cotton or in a piece of mosquito netting, light burlap or other porous material will hold the wings in position until they dry.

In dry climates, salt will serve as a substitute for the borax as a preservative although in humid weather, pepper is a better substitute because of the water gathering tendency of salt. Bicarbonate of soda has also been substituted for the borax on occasion and will do the job with a reasonable degree of satisfaction.

Keep the completed skin dry and protected from mice, rats, and other vermin. A sprinkling of moth flakes will help discourage moths and other pests. A specimen treated as described will keep indefinitely. If your part of the work is done carefully, a competent taxidermist will have no trouble relaxing the skin and converting your specimen into the beautiful trophy you expected. ●

MEET YOUR COMMISSION

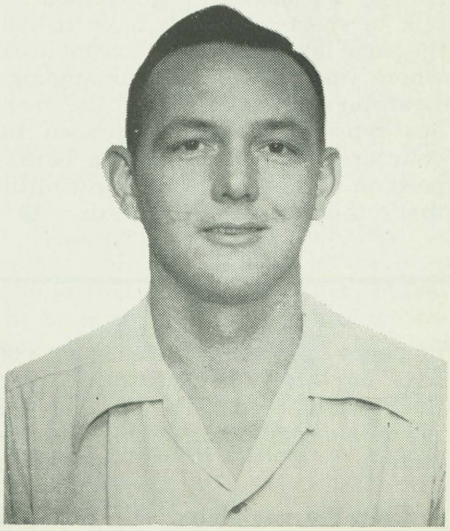


RICHARD E. EICHHORN
Game Management Division

Born in Davenport, Iowa, Dick Eichhorn joined the Game and Fresh Water Fish Commission as a Fisheries Management Technician on June 16, 1952. Shortly thereafter he transferred to the Game Management Division where he now serves as a Game Management Technician. Dick is in charge of the Lake Butler, Camp Blanding, and Little Talbot Island Management Areas.

Mr. Eichhorn is a graduate of Utah State Agricultural College and a veteran of World War II in which he served as a Sergeant in the European Theater of Operations. He was formerly employed by the Bendix Aviation Corporation as an instrument inspector.

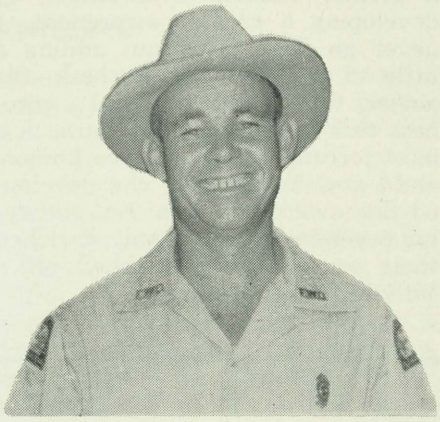
Dick, his wife, the former Eleanor O'Connor of Iowa, and their son, David, age 2, live in Lake City.



LEWIS K. JETER
Game Management Division

Lewis K. Jeter, Wildlife Biologist in charge of the Gaskin and Blackwater Management Areas in northwest Florida, was employed by the Game & Fresh Water Fish Commission during February, 1952. "Jeter" also assists on the Eglin Airbase Management Area and the Federal Aid Game Management Research Project.

Born in Elba, Alabama, Mr. Jeter attended Alabama Polytechnic Institute at Auburn from 1948 to 1952. He and his wife, Ann, and one child, Belyn, age 4, now reside in Milton, Florida.

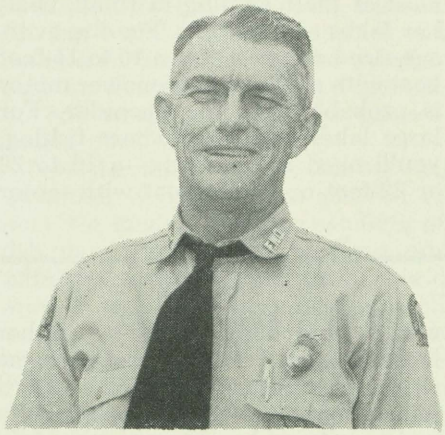


CARL LeROY HAWKINS
Northeast Region

Carl Hawkins became a Wildlife Officer on February 24, 1953, and since that day has served in Suwannee County. Carl and his wife, the former Dorothy Hatch, live in Branford with their three sons, Bobby, 14; Billy, 12, and Gary, 5, and one daughter, Linda, 9 years of age.

Before his present appointment, Mr. Hawkins worked as a farmer and was employed by the Atlantic Coast Line Railroad as a fireman.

A graduate of Branford High School, Carl belongs to the Branford Sportsmen's Club, is a Mason and an active member of the Magnolia Baptist Church.

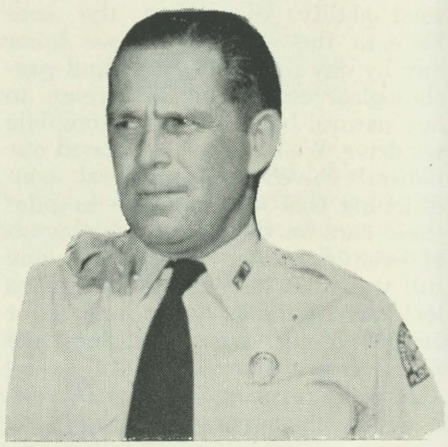


FRED KIRKLAND
Northeast Florida Region

Born and raised in Levy County, Florida, Fred Kirkland has ably served that area as a Wildlife Officer since September 20, 1941.

Before joining the Game Commission, Fred worked at farming and stock raising, and for four years was employed by the Florida Forestry Service. He and his wife, the former Annie May Melton, live at Cedar Key with their four children, Barbra Jean, 20; Perry, 18; Doris, 10, and Rhonda, 7.

Mr. Kirkland is a member of the Baptist Church and for over ten years has been an active Mason.



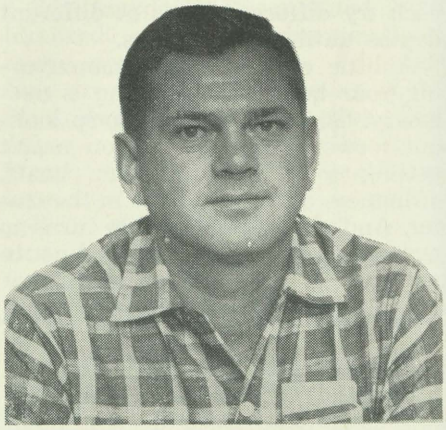
WHIT CLIFTON MYRICK
South Florida Region

Whit Myrick was employed by the Florida Game and Fresh Water Fish Commission on May 1, 1952, and serves as a Wildlife Officer in Manatee County. Prior to his present appointmant, Whit worked for the Security Feed Company of Tampa and for the Tampa Daily Times.

Mr. Myrick served as a Chief Petty Officer in the U. S. Navy from 1943 to 1947 and saw action with both the Pacific and Atlantic fleets.

Born in Ellenton, Florida, he attended the Ellenton Grammar School and in 1939 graduated from Palmetto High School.

Whit and his wife, Ruth, live in Parrish, Florida, where he is an active member of the Manatee County Wildlife Association.



FRANK A. WINSTON
Game Management Division

Project Leader Frank Winston joined the Game Commission as a wildlife biologist on April 15, 1949. Frank has gained national recognition for his extensive Mourning Dove Study Program and is in charge of the North Florida Management Area Development Program, both Federal Aid Projects.

Mr. Winston attended Depauw University from November, 1944, to June, 1946, and Purdue University from September, 1946, to February, 1949. A veteran of World War II, he served as a weapons instructor in the U. S. Infantry.

Frank and his wife, the former Sue Enders of Indiana, live in Lakeland. They have a daughter, Phoebe Ann, age 3, and a son, Peter, 6.

TEACH 'EM EARLY

(Continued From Page 29)

habit. Safety will be second nature to him and he won't be careless. When Junior enters military service he will be one of those rarities in his generation — a man who can shoot and who can teach others to shoot. Many, many such Juniors can well keep our country free in the troubled years ahead—an insurmountable obstacle to termites from within as well as from aggressors from without.

Best of all, Junior and Dad will have mutually beneficial happy hours together on a common meeting ground with rich dividends of genuine companionship. ●

NAPOLEON OF THE NORTH FORK

(Continued From Page 26)

One balmy tropic night an excited guest, who undoubtedly had been accustomed to sleeping in less rugged surroundings, dashed in alarm from one of the river-edge cabins to awaken Burt.

"The Devil must be loose out there on the water," this pajama-clad man gasped. "Come quickly . . . it's awful!"

Pruitt stuck his grizzled head out the door and listened a moment. Then he pulled on his pants and hurried after his guest.

The din that could be heard coming across the black water was indeed weird. Shrill squeals and the hot, hissing exhalations of breath punctuated repeated heavy splashings from leaping, unseen bodies.

Suddenly Burt paused in the darkness. "It's manatee," he grunted disgustedly. "They're mating."

He directed his flash beam out across the river's surface to the spot where it was being violently agitated. Shortly, a grotesque head appeared, replete with thick cow lips. Large black and lidless eyes glared at them ghoulishly from a dripping, whiskered face. Then the night-marish creature returned to the depths, taking a half-thousand pounds of walrus-like body with it.

For the Georgia-born guide the appearance and behavior of each tree or bush, each bird, animal or fish on his cherished range carries a special significance. For example, the alligator which habitually remains submerged except for the top of its head automatically reveals its size to Pruitt, since each inch of separation between nose and eyes foretells of approximately one foot of body length. The tall and otherwise healthy cabbage palm, strangely denuded of its bushy top as it stands among its neighbors, has served as the nesting site for a particular type of heavy bird. And the nest you come upon in a tree on the riverbank is that of the great blue heron, and not the sandhill crane whose strident cry you may have heard as you dropped to sleep the night before, since the latter nests only on the ground.

You learn the answers to such outdoor mysteries, however, only after you have convinced the stocky little guide of your sincerity. During his 25 years he has grown weary of the inevitable "experts" who would explain such things to *him.* When such visitors do take time out to ask the inevitable question "When do you find is the best time to fish?" Burt's classic reply is always delivered with typical dryness from behind his dead-pan expression.

"The right time to go fishing is when *you* feel like it; the best time to catch 'em is when *they* feel like it."

Strangely enough, it has been Pruitt's experience that "New York schoolkids can name more birds in this state than can most Floridians."

Sometimes, too, Burt finds himself disappointed with his fellow man for demanding too much of what his Maker put there for him to enjoy. Once a commercial air line pilot from Chicago came to the stocky little guide, determined to fight some big tarpon.

"He was a fishin' fool, all right, that fellow; one of those daylight-till-dark gents. I hooked him up with several dozen tarpon, but he wasn't satisfied. Each time he expected something bigger.

"Finally, one surfaced right alongside the boat. Leaping high into the air, amidst a welter of spray, it seemed to hurl its big body right at my companion.

"The fishing line, blown by the wind, got fouled about the pilot's neck. Just then the fish hit the water again and decided he'd show us how fast he could leave us.

"He was a real bruiser, and as he shot away he caused the line to burn into the man's neck. You should have heard him holler. By the time I got my knife loose and cut that nylon I looked around at the brush on the river bank. He'd been yelling louder than a Georgia hog-caller, and I half expected to see the woods full of pigs.

"That little experience quieted him, however. I don't believe he's fished for 'big tarpon' since."

Burt continues to fish, however, whether it be for big tarpon or any of the many other sea specimens that "just don't pay no attention to my sign" which he nailed to a tree on the river bank where the salt water ends and the fresh begins. Each day finds him out on the water. Sometimes it is just to prowl contentedly through his wilderness paradise. He and his wife remain happy there. Their earnest advice to all other couples is to "get out . . . get as far away from the crowded centers as your jobs will possibly let you . . . for getting close to the soil is one sure way to contentment, and the soil is fast disappearing!"

As this is written Burt but recently startled a delegation of Florida promoters by refusing the staggering sum of $200,000 for his swamp, much of which is underwater. "We've found peace here," Burt told them shortly. "The kind of peace we can't buy with the dollars you want to give us."

And, with an already over-populated world threatening to soon run completely out of such peace-producing soil, it appears that the Pruitts may have a point. With longevity increasing at a rapid rate on all sides, the present world population is jumping upward at the rate of about 25 million persons annually. As recently as 30 or 40 years ago this same population was about static: the birth rate equalled the death rate. ●

"Warm enough now, dear?"

FLORIDA WILDLIFE FIELD TESTS AND TELLS

FOR more than a year, FWFT&T has been giving exhaustive field tests to Val-Do products, especially the gun and reel oils, Penalube gun cleaner and the motor oil and gasoline additives, and now endorses them to readers with every confidence in their performance.

In motor car engines, outboard motors, gasoline power mowers and other combustion type engines, greatest wear on cylinders and piston rings is during critical short periods of the total operating time. Greatest wear takes place when engine starting is marked by metal to metal contact without a clean and uniform oil film between working parts.

Val-Do No. 1, added to a tankful of gasoline in the proportion recommended on the can, lubricates upper cylinders and valves of combustion type engines and helps to keep them clean, while Val-Do No. 2 added to the motor oil cuts motor varnish and sludge, promotes better valve seating and assures more efficient ring performance.

FWFT&T has mixed Val-Do No. 1 and Val-Do No. 2 with outboard motor fuel and obtained excellent motor performance, plus easy starting, even from outboards dating back to 1944. With clean spark plugs, good ignition and a little of the two Val-Do engine additives in the fuel you use, your outboarding should be notably free from engine troubles. FWFT&T wouldn't think of making an extended boat cruise without Val-Do No. 1 and Val-Do No. 2 proportionately mixed with fresh fuel carried in a clean container. Not too long ago, an outside, "on-the-Gulf" run was made with a 1947 Martin model 60 outboard and small boat over the long stretch between Marco Island and Broad River. The fact that the round-trip was made without any motor trouble whatsoever undoubtedly had strong influence from the inclusion of Val-Do No. 1 and No. 2 oils in the motor fuel.

Chemical tests by FWFT&T and others show that the Val-Do motor additives are free from objectionable alkalines, acids, lead, chlorides, naphthas, graphite and chemicals harmful to engine metal. The analysis by FWFT&T showed a predominant blend of penetrating oils with high grade petroleum oils.

The gun cleaning mixture is especially recommended for the removal of stubborn powder fouling. In collaboration with **Florida Wildlife's** Gun Editor, Major-General Julian S. Hatcher, of the National Rifle Association, and Bill Donovan, Vice-President of the High Standard Manufacturing Company, found the cleaner excellent for removing fouling from .45 caliber machine gun barrels, that rival products failed to clean.

Val-Do's packaging of special lubricants for guns and for fishing reels gives the sportsman dependanble lubricants for hunting and fishing equipment. To test the oil film, coat a piece of glass and rub that piece with another. If the glass was clean at the start of the test, you won't feel any grittiness or abrasive action as you slide the top glass over the lower one. Such fine film lubrication means a lot where working gun and reel parts are fitted to extremely close tolerances.

Val-Do's penetrating oil should not be confused with the lubricating reel and gun oils. The penetrating oil is chemically compounded to dissolve rust and corrosion. If a metal surface is porous at all—and most metals are, as shown by microscopic examination—Val-Do penetrating oil will get in to do its job. FWFT&T had the mixture work its way entirely through a piece of cast iron in a prolonged test.

Look for Val-Do products where you buy your motor fuel. Made and distributed nationally by Val-Do Products Company, St. Petersburg, Florida.

BIRD shooters afield on warm days frequently find regular weight, full sleeved hunting coats too hot for active wear. On such days, a sleeveless hunting vest, rather than a regular hunting coat, is needed.

The Red Head Brand Company's answer to widespread demand, and to an especial existing need in Florida, is that firm's deluxe "Aristocrat" upland game vest, tailored on a design the result of years of field testing by experienced sportsmen.

FWFT&T gave the Red Head Brand sleeveless hunting vest hard wear during the first half of Florida's 1956 dove season and is satisfied that it is both practical and comfortable under all encountered field conditions.

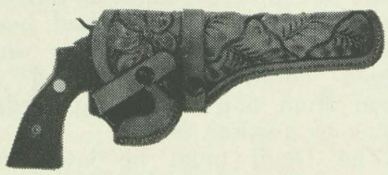
Made of Zelan treaten sun tan Fishuntex material that is light in weight, soft to the touch, pre-shrunk and colsely woven for briar resistance, the Red Head "Aristocrat" shooting vest has both good looks and good features. Quilted shoulder patches and pockets of rugged dark brown gabardine provide a snappy, contrasting appearance and make one standard design suitable for both right and left handed shooters.

Besides a roomy "no spill" shell pocket on each side, with provided tab fasteners, the Red Head vest has twenty-five sewn shell loops, with elastic tops, to accommodate all gauges of shotgun shells. The vest has a large neoprene-coated game pocket in the rear section. Adjustable waist fasteners and a full length closing zipper enable the wearer to enjoy either close or loose fit.

Lists in the Red Head Brand Company's catalog as the No. QV "Aristocrat," available in small, medium, large and extra large sizes. Each vest comes packed in a Polyethylene bag, and you can get some idea of individual garment weight from the fact that a dozen such vests packed for shipment weigh fourteen pounds. Lists for $9.75.

There is nothing cheap looking nor of shoddy manufacture about the Red Head Brand "Aristocrat" vest. Like all outdoor products by this old and reliable manufacturer, the No. QV listing is top quality throughout.

To get your correct size, measure over a regularly worn hunting shirt. The Red Head Brand Company, 4311 Belmont Avenue, Chicago 41, Illinois, will honor direct orders if you cannot find the garment locally.



A belt-carried "plinking" handgun deserves a good holster—for convenient carrying, for the protection a holster gives against accidental dropping and from the other mishaps common to handguns in active service.

Good handgun holsters come high as a general rule, and FWFT&T has paid as much as $23 for a product of high quality. Good ones in the lower price brackets have been hard to find.

Therefore, it is not surprising that the No. 3100, hand-carved flower design Hunter holster, made of California oak tanned leather, neats-foot oil treated, in a choice of closed end or open end styles, is enjoying ready sale at its low price of $5.45.

The Hunter No. 3100 holster can be had for either a revolver or an autoloading pistol, and is guaranteed to fit the handgun for which it is sold. Each holster is provided with both a quick snap-on belt loop and a gun-guard safety strap.

The firm has been making leather goods for more than forty years and guarantees its workmanship. The fact that Williams Gun Sight Company, Davison, Michigan, a firearms accessories' firm known to shooters everywhere, prominently features the Hunter No. 3100 all-leather handgun holster in the company's catalog, is added assurance of the product representing quality merchandise. Williams Gun Sight Company does not sell junk—definitely!

Forty-one different sizes are available, and it is possible for the handgunner to get proper holster-fit for any of the current production handgun models and for many military or foreign styles.

You can order from Williams Gun Sight Company, Davison, Michigan, or direct from the manufacturer, the Hunter Company, P. O. Box 94, Highland Station, Denver, Colorado. Only $5.45.

T.S.I. AND WILDLIFE

(Continued from Page 13)

as a marketable tree. Magnolia (*Magnolia* spp.), gum (*Liquidambar styraciflua*), maple (*Acer* spp.), and to a lesser extent hickory (*Carya* spp.) were considered desirable species while live oak (*Quercus virginiana*), laurel oak (*Q. laurifolia*), and water oak (*Q. nigra*) were the species most commonly treated as undesirable. Other species were also taken into consideration, but in this area the above mentioned trees are by far the most common trees present.

Although the T.S.I. area to be studied was small, the same study procedures were used in this area as already described for the longleaf pine area. Ten plots were intensively studied within the river swamp, ten in the transition zone between the river swamp and the river hammock, and ten in the hammock.

The river swamp is considered to be those areas that are usually inundated from the river. The overstory consists primarily of sweetgum, cypress, oaks, and maple. The transition zone is the area where the land is higher and seldom has any standing water. The overstory is primarily of oaks, magnolia, and sweetgum. The hammock is comparatively high and dry with an overstory of oaks and magnolia with scattered hickory and sweetgum.

Within the river swamp a total of 14 oaks (4° DBH or greater) per acre was recorded. Of these, 13 had been girdled causing 93 per cent destruction of the oaks within this area. Sweetgum was the most common desirable hardwood species with which the oaks were in conflict. Many of the live oaks in this area were huge, having a 24 inch DBH or greater.

In the transition zone a total of 66 oaks per acre was recorded. Sixty-three of these had been girdled, making a 95 per cent destruction of the oaks. Magnolia was the most common desirable hardwood with which the oaks were in conflict. As was the case in the river swamp many large live oaks were present.

In the hammock area a total of 77 oaks per acre was recorded. Thirty-eight of these had been girdled and four cut down for a 54.5 per cent destruction of the oaks in this area. Magnolia was the hardwood with which the oaks were in conflict.

In the hardwood swamp areas oak mast is not only important to deer but also very important to squirrels and turkeys. The oak mast is especially important to turkeys and squirrels during the long hunting season when they seldom venture out of the river swamp and must depend upon the available food in these areas.

The author noted that the logging operations in this area had torn down and knocked over many of the understory shrubs causing a heavy sprout growth. There was evidence of heavy deer browsing on this sprout growth.

TABLE 3. SUMMARY OF T.S.I. PROGRAM IN HARDWOOD SWAMP AREA

Area	Av. No. Oaks Per Acre	Av. T.S.I. Treated	% Oaks Destroyed
River Swamp	14	13	93.0
Transition Zone	66	63	95.0
Hammock	77	42	54.0

T.S.I. Area for Release of Sand Pine Seedlings

A small area was T.S.I. treated for the release of sand pine seedlings. The same steps were taken as described when the longleaf pine seedlings were released. This area had originally been in longleaf pine as evidenced by a few remaining longleaf pine and also by adult sand pine with cones that were apparently opening and reseeding the surrounding territory. Sand pine cones usually do not open in the sand pine habitat type without fire, but will open in the longleaf pine areas. A heavy stand of turkey oak had formed an overstory over the sand pine seedlings.

In this small area the author did not set up any plots for intensive study, but did cover the area on foot. Heavy sand pine reproduction in the area resulted in an almost 100 per cent T.S.I. treatment of the oaks.

T.S.I. Area for Releasing and Planting Slash Pine

A small amount of work has been done in the Seminole Ranger District to increase the acreage of slash pine through a T.S.I. program. This program consists of clearing a narrow strip around ponds either with a brush cutter or by girdling and poisoning. Slash pine is then planted in these treated areas.

No study plots were set up in this area, but the areas treated were carefully examined. In those areas where the brush cutter was used, the oaks and palmettos were not killed but severely cut back. In those areas where the larger oaks were present they were girdled and poisoned. Almost 100 per cent of the oaks were killed in these small areas that were poisoned.

Conclusions

A careful appraisal of the results of this study indicates that the T.S.I. program to date in the Ocala National Forest has hurt the wildlife habitat in certain areas but has possibly helped in others. Whether this program helps or hurts the wildlife habitat depends primarily upon whether it is conducted in a heavy oak stand or in a thin stand, and whether there is a good or poor reproduction of desirable commercial species.

The overall picture of the T.S.I. program in the longleaf pine areas showed an average of 18.8 trees untreated per acre which is probably enough oaks per acre for game food needs. It should be pointed out, however, that where only two or three oaks were left per acre, the number is insufficient to provide enough mast for game needs in these areas. The project leader believes

(Continued on Next Page)

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(Continued From Preceding Page)

that it is to the advantage of the deer herd if a suitable number of oaks can be left for each and every acre instead of concentrating the oaks in local areas.

In those areas where a heavy stand of oaks is present, 50 oaks to the acre or better, the T.S.I. program may help game food production in two ways. The T.S.I. treatment will break up the overstory which in turn should increase the ground plant growth, increasing the amount of available deer browse. Secondly, by opening up the overstory the competition between oaks is reduced and in the long run more acorns may be produced.

In those areas where 1-10 oaks per acre were found the T.S.I. program definitely hurt the wildlife habitat. In these areas only 2.8 oaks per acre were left untreated and in most cases the oaks in these areas were large with good crowns which produce a better crop of acorns than some of the more crowded oaks.

In those areas where 10-20 oaks per acre were found the overall wildlife habitat was injured, but not as severely as in the 1-10 oaks per acre group. In those areas with 20-50 oaks per acre the T.S.I. program probably neither helped nor hindered to any great degree.

In the hardwood swamp area where a small T.S.I. program was conducted the author believes the game habitat was temporarily improved for deer, but seriously injured for squirrels and turkeys. The help this program may give deer is through the opening of some of the heavy overstory allowing more browse species underneath, though at the same time deer will suffer from the loss of mast. The very heavy kill of oaks in the river swamp and the transition zone cannot help seriously decreasing the available mast for turkeys and squirrels.

In the area where the T.S.I. program was used to release sand pine seedlings the game food production was greatly decreased. Not only is almost all of the turkey oak mast crop gone, but as the sand pine seedlings mature they will choke out many of the browse species present. Sand pine have the facility of growing in such thick stands they completely dominate other plant species in that area.

Whether the T.S.I. treatment for slash pine release and planting helped or hurt the wildlife habitat depends upon the type of treatment used and the areas in which the work was conducted. As deer are the only game species present in any quantity in these areas, the term wildlife habitat is synonymous with deer habitat in the following discussion. In those areas where the scrub oaks and palmettos were brush cut back from the edges of ponds, the wildlife habitat was probably helped, as this treatment induces vigorous sprout growth throughout the area treated. The amount of mast lost in these areas would probably have little effect upon the game populations.

Where the larger live oaks were killed by girdling and poisoning the effect undoubtedly was unfavorable. This treatment will increase the ground cover to a small degree but will drastically curtail the mast production in the areas treated.

Suggested Recommendations

These recommendations are intended only as a guide until further research work points out better steps to take in coordinating wildlife habitat needs with the T.S.I. program. They are made with the objective of trying to coordinate the needs of both wildlife and timber programs.

Considerable time has been spent not only by the author, but by other Florida Game and Fresh Water Fish Commission personnel and the U. S. Forest Service officials in the writing of these recommendations. Efforts are being made by U. S. Forest Service officials to adopt these regulations into the T.S.I. program of the Florida National Forests.

A. *Longleaf, Slash and Other Pine Types*

1. No timber stand improvement will be done in areas containing less than ten oaks per acre.
2. In areas containing more than ten oaks per acre, a minimum of five well formed game food producing trees (oaks preferred) will be left in each acre. If possible, trees will be well distributed over the area. Trees with ten inch DBH or greater will be selected when available.
3. In addition, four den trees per ten acres and all occupied den trees will be left.

B. *Bottomland Hardwood Type*

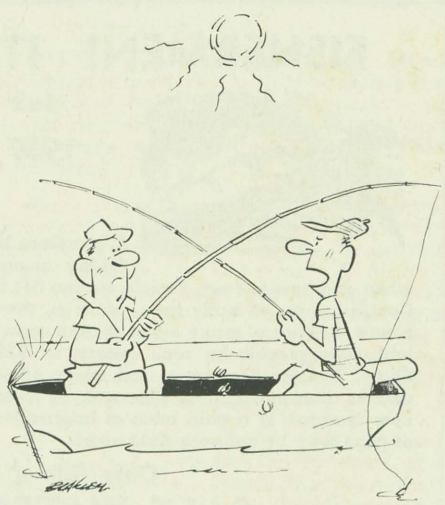
1. A minimum of five well formed game food producing trees (oaks preferred) will be left in each acre. If possible, trees will be well distributed over the area. Trees with ten inch DBH or greater will be selected when available.
2. In addition, four den trees per ten acres and all occupied den trees will be left.

C. *Live Oak Hammock Type*

1. No stand improvement work will be scheduled in areas containing less than two acres.

D. *Sand Pine Type* (Ocala National Forest)

1. Sand pine encroaching in the longleaf type will be eliminated, except in areas stocked with 500 or more sand pine trees per acre and which average 36 inches or more in height.
2. Control of encroaching sand pine in the longleaf type will be accomplished by prescribed burning or by removal of merchantable trees in timber sales.



"Think of it,—going out in this blazing sun just to buy a new hat. Sometimes I think women are crazy."

Most Desirable and Desirable Trees for Wildlife Management

Most Desirable Hardwoods	*Desirable Hardwoods*
Turkey Oak	Hickory
Live Oak	Tupelo Gum
Water Oak	Beech
Laurel Oak	Maple
Overcup Oak	Basswood
Cow Oak	Sycamore
Post Oak	Elm
Blue Jack Oak	Ash
Black Gum	
Black Cherry	
Magnolia	

Other Preferred Tree and Shrub Species

Iron Wood	Myrtle
Holly	Gooseberry
Dogwood	Sparkleberry
Persimmon	Wild Grapes
Youpon	Virginia Willow

FLORIDA BIG BUCK CLUB

Leonard Lee Rue III

AGAIN THIS YEAR the Game and Fresh Water Fish Commission is undertaking a plan to give recognition to those hunters who bag trophy bucks in the state. The bagging of a buck weighing 130 pounds dressed weight, or more, qualifies the hunter for membership in the club. Certificates of membership and a colorful shoulder patch for hunting jacket or shirt will be given by the Commission to those who qualify.

Application forms for club membership must be forwarded to the Game and Fresh Water Fish Commission, Tallahassee, within ten days after the buck is killed.

The weight must be certified by a wildlife officer, checking station operator, game technician, county judge, or notary public. The deer must have been taken in accordance with state game regulations. No buck of less than 130 pounds dressed weight (approximately 156 live weight or dressed weight plus 20%) will be eligible for registration. Any buck, of the minimum weight or over, taken anywhere in the state by either resident or non-resident hunter will qualify.

The following hunters registered trophy bucks with the Game Management Division last year:

NAME	ADDRESS	NUMBER POINTS l.	r.	WEIGHT	LOCATION	DATE
A. W. Arrington	Chiefland	6	6	168	Gulf Hammock Mgt. Area	Nov. 23, 1955
James O. Boyd	New Smyrna Beach	4	4	135	Farmton Mgt. Area	Dec. 24, 1955
Lemoyne C. Ezell	Stuart	5	5	157	Okeechobee Mgt. Area	Nov. 25, 1955
G. J. Faulkner	Lake Park	3	3	160	J. W. Corbett Mgt. Area	Nov. 23, 1955
J. H. Freeman	Jupiter	3	4	220	J. W. Corbett Mgt. Area	Nov. 26, 1955
Larry H. Knapp	Ormond Beach	4	4	130	Tomoka Mgt. Area	Nov. 27, 1955
Charles Lundy	Winter Haven	6	5	140	Ocala Mgt. Area	Nov. 23, 1955
Robert A. Paddon, Jr.	Miami	4	4	130	Volusia County	Nov. 25, 1955
Gerald W. Pay	DeLand	4	4	204	St. Johns County	Dec. 8, 1955
I. L. Ross	Panama City	4	4	195	Gaskin Mgt. Area	Nov. 23, 1955
Jack Sennett	Daytona Beach	3	2	133	Tomoka Mgt. Area	Nov. 24, 1955
DeWitt Upthegrove	West Palm Beach	—	—	175	J. W. Corbett Mgt. Area	Nov. 24, 1955

TO: Game Management Division,
GAME AND FRESHWATER FISH COMMISSION
Tallahassee, Florida

Application is hereby made for membership in the Florida Big Buck Club, based upon the following considerations: (Fill in form as completely as possible.)

Date Deer Killed ..... County ..... Area .....

Habitat Type Where Killed (Oak ridge, cypress bay, etc.) .....

Dressed Weight ..... Live Weight .....

Basal antler circumference. Right ..... Left .....

Number of antler points. Right ..... Left .....

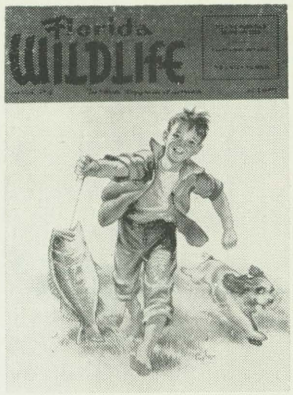
Age of deer ..... Condition .....

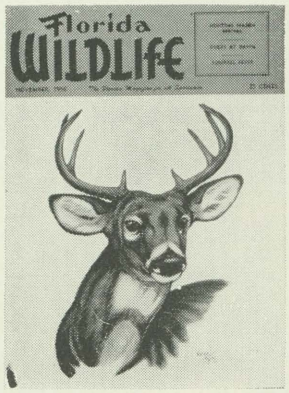
Name of Hunter ..... Address .....
(please print) (Street or P. O. Box No.)

Signature of Hunter ....
(city)

Certified by ..... Title .....
(See instructions above)

Subscribe NOW





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